This Edition
for sale on adoption to
Students Only

Julius A. Pardee
720 Church St.

AUDITING
THEORY AND PRACTICE

By

ROBERT H. MONTGOMERY, C.P.A.

of Lybrand, Ross Brothers and Montgomery; Attorney-at-Law; Professor of Accounting, Columbia University; Former President, American Association of Public Accountants; author of "Income Tax Procedure"

THIRD EDITION
REVISED AND ENLARGED

IN TWO VOLUMES

VOLUME I
GENERAL PRINCIPLES

Fourth Printing

NEW YORK
THE RONALD PRESS COMPANY
1922

Copyright 1912, 1915, and 1921, by
ROBERT H. MONTGOMERY

Copyright 1916, by
THE RONALD PRESS COMPANY

All Rights Reserved

PREFACE TO THIRD EDITION

Since the publication of the second edition of this book in 1916, the fluctuations in financial and business conditions have been more violent than during any previous five years in the history of the world. We have had unparalleled inflation and partial deflation. Tax rates have been so high that nearly seven-eighths of the net incomes of some taxpayers for one year were paid in taxes. Notwithstanding the extraordinary tax levies, the annual net incomes remaining to many taxpayers after allowance for taxes exceeded their incomes of prior years. Some concerns are worse off financially in 1921 than in 1916; they made large paper profits and distributed only a small portion of their realized profits in dividends, but they overexpanded or they were not prepared for the rapid fall in prices. Conservative concerns paid relatively higher taxes than those which had never pursued conservative policies.

Professional auditors occupied responsible, arduous, and useful positions throughout the five years. In the World War they were found in the trenches, in aeroplanes, and in vessels on and under the water. Those who were not allowed to fight the enemy abroad, fought him at home. The war was won in more ways than one. The professional auditor did his duty to his country and to his profession. The profession met the test of war and inflation and has tremendously increased in prestige. There is no longer any doubt regarding the value of the services of the professional accountant.

What of the future? Have we learned anything? Did any of our theories fail in application at critical times? An inclusive answer can be made. In serving others, accountants have served themselves. The future is bright because we have profited by our mistakes. It is a cause for congratulation that accountancy is living up to the best traditions of a learned profession and is

discarding obsolete theories and substituting new ones as rapidly as conditions warrant.

Naturally there are some statements in the new book which conflict with cherished and long-thought-out ideas in the old. Perhaps I should be proud to say that I have changed my mind in several important matters, but I am not advanced enough to be proud of it; I am sorry, rather, that we must change some of our accounting theories.

We are more sure of the meaning of accounting terminology. In view of the greatly increased use of the term "good accounting practice" in tax laws, legal instruments, and business agreements of all kinds, I have attempted to define the term as applied to many different situations. My definitions are not inventions. Good accounting practice is merely the practice of good accountants. I have given due consideration to what other accountants are doing and saying, and the results are embodied in this book.

As a whole this book purports to be an audit program, but it is general, not specific, and leaves something to the skill and imagination of the auditor. When a professional man becomes too technical, too specific, he falls into a rut, and the rut retards and cramps his professional career. It is imperative that financial statements should reflect full and true financial conditions; to be full they must be flexible; to be true much must be left to the experience, skill, and discretion of the auditor.

I am not satisfied with all the rules that govern the preparation of present-day balance sheets. Conservatism calls for writing down assets when market values fall, and leaving assets at cost when values rise. This works out well when there are no rapid or radical changes in market conditions. When values fluctuate widely, however, balance sheets do not reflect the "full and true financial position" which is the goal of the auditor. When the market is advancing, valuations at cost by no means reflect the "true financial position." When the market is declining, valuations usually are too high, even though written down to market at date of the balance sheet.

If auditors in their discretion fail to write values up in an advancing market, why does not sound judgment dictate that in a period of steadily declining prices, values shall be written down below apparent market at date of balance sheet? The rule, "cost or market, whichever is lower," must be amplified and given more flexible application in times when the trend of prices is sharply upward or downward. I have exhaustively discussed these points in the inventory chapters.

My suggestion is that when reappraisals or inventories at market indicate higher values than cost, the appreciation may be expressed in the balance sheet provided the increment is not set up as realized. I am not sanctioning the practice of anticipating profits, for that is vicious. Let me illustrate. If a concern buys or produces copper at 10 cents a pound, which at the date of inventory is freely selling at 15 cents a pound, and the market continues to rise after the date of the balance sheet, surely no sound accounting or economic principle is being violated if the market value as well as cost is shown in the balance sheet. To carry copper at 10 cents because cost is lower than market, would be positively misleading unless the additional financial resources of the concern are disclosed somewhere on the statement. Likewise, when copper costs 20 cents and at the date of balance sheet is selling for 18 cents, and after the date of the balance sheet has declined still further, it is equally deceptive to value the copper at 18 cents merely because that happened to be the market price on one day.

I stand always for conservatism in the preparation of balance sheets, but I do not like to see business men deceive themselves through misrepresentation of financial position. I would not hesitate to cut market prices to a level, however low, that would correspond with my estimate of the ultimate drop.

I have not formulated a new rule, but I suggest amplification of the old rule so that the balance sheet may more nearly reflect a concern's actual financial position than under the present inflexible rule.

During the period of high taxes and large profits, business men required no urging to be conservative. During the next few years when taxes and profits are likely to be lower, there will be little incentive to conservatism, with the result that auditors will be under pressure from which they have been free for several years. Their actions and decisions under these circumstances will be a test of professional standing; those who yield not only will damage their own reputations, but will prolong the financial stress of their clients; those who insist on the maintenance of the highest professional standards will increase their own prestige and perform substantial service to their clients.

In many respects this is a new book rather than a new edition. It deals with present-day problems. In rewriting the part relating to general principles, I have retained much of the old text, because it is not obsolete. There are about two hundred pages of new text, chiefly containing comments on valuations, changes growing out of the war and post-war influences, other balance sheet matters, references to specific cases of interest, and definitions of good accounting practice. Under the circumstances, it was impracticable to include any comprehensive discussion of special points in one volume of reasonable size; therefore, two volumes became necessary. In the first volume, general principles are discussed; the second volume is devoted to audit procedures that are applicable to various classes of business.

It has been suggested that the second edition was too comprehensive for students. I realize that many students and some instructors are anxious and willing to substitute a smattering of the subject for an exhaustive study, but happily they comprise a small minority.

I wish to express my appreciation of the many criticisms and helpful suggestions made by my partners, William M. Lybrand, C. P. A., and Walter A. Staub, C. P. A. Naturally some of my comments represent personal views which are not shared by all the partners; the responsibility for the book is mine and is not shared by the firm. It is, however, true that when I refer to

"good accounting practice," I adopt or discuss the practice of all reputable firms whose published balance sheets, certificates, reports, and writing have been available.

Necessarily much of my work was done at irregular intervals, which meant that my notes required careful revision and arrangement. This work was done for me by Professor Earl A. Saliers of Yale University, and I take this opportunity to express my appreciation of his able and conscientious work.

During the five years since the second edition was issued, I have received a great many criticisms and suggestions from readers and students. In most instances, I have responded promptly; in others, absence from the country or activity in war service has prevented answers. In all cases, however, I greatly appreciate comments and suggestions. I am particularly glad to be told wherein I am wrong.

ROBERT H. MONTGOMERY

55 Liberty St., New York,
November 5, 1921.

CONTENTS

Chapter		Page
I	The Auditor and His Work	3
	Qualifications of the Auditor Legal Responsibility of Auditors Professional Ethics	
II	The Purposes of an Audit	18
	A Constructive Program The Purposes of an Audit The Minor Objects of an Audit	
III	Advantages of an Audit	29
	Verification of Balance Sheet Major Advantages	
IV	How to Begin an Audit	39
	A Preliminary Program The Detailed Audit Balance Sheet Audit Suggestions to Client's Staff before Commencing Work	
V	Audit Procedure	60
	Program of Audit Papers, etc., Required by Auditor	
	System of Internal Check	
	Purpose of Internal Check Branch Office Accounts	
VI	Balance Sheet Audit—Assets	71
	General Principles Limitations of Balance Sheet Audits Must Be Understood Analysis of Assets Basis of Valuation of Assets Current Assets	
VII	Balance Sheet Audit—Current Assets	85
	Cash Accounts Receivable Instalment Accounts Export Sales Deposits Verification of Outstandings by Correspondence Notes Receivable	

CHAPTER PAGE

Accrued Interest Receivable
Stock Subscriptions
Investment Securities
Securities as Stock-in-Trade
Liberty Bond Valuations
Insurance on Lives of Proprietors
Temporary Investments
Postage and Other Stamps
Deferred Charges to Operation—Prepaid Items

VIII INVENTORIES—GENERAL PRINCIPLES 117

Introductory
Need of Understandable Rule of Valuation

VALUATION PROPOSITIONS TO BE CONSIDERED

1. When Is It Proper to Value Inventories at Less Than Either Cost or Market?
2. When Is It Proper to Value an Inventory at "Cost or Market, Whichever Is Lower"?
3. When Is It Proper to Value an Inventory at Reproduction Cost, It Being Higher Than Replacement Cost?
4. When Is It Proper to Value an Inventory at Market, Market Being Higher than Cost?
5. When Is It Proper to Value an Inventory at Selling Prices?

Prices After Closing Date
Interdepartmental or Intercompany Profits
Segregation of Stock Which Cannot Be Converted into Cash Within One Year
Auditor's Legal Duty as to Inventories
Interest Not an Element of Cost

IX INVENTORIES—RULES FOR VALUATION 159

Proper Rule for Valuation
Rules for Verifying Quantities and Other Factors
Goods in Process
Finished Goods
Supplies, Stores, etc.

X BALANCE SHEET AUDIT—FIXED ASSETS 173

Nature of Fixed Assets
Plant Accounts Must Be Analyzed

METHODS OF ARRIVING AT BALANCE SHEET VALUATIONS

Land and Buildings
Leaseholds
Machinery and Equipment
Furniture and Fixtures
Containers
Horses
Wagons, Automobiles, etc.
Patterns, Drawings, Lasts, etc.
Electrotypes, Woodcuts, etc.

CHAPTER PAGE

Patents
Copyrights

XI BALANCE SHEET AUDIT—FIXED ASSETS (Continued) . 195

GOOD-WILL

Earnings the Principal Factor of Value
Formula for Determining Value

FUND ACCOUNTS

Sinking Funds
Funds Representing Investments of Reserves
Fund and Other Permanent Investments
Bonds and Mortgages

TREASURY STOCK

Unissued Capital Stock

WASTING ASSETS

Values to Be Written Down

CONTINGENT ASSETS

Capital Stock Calls and Assessments
Liabilities of Directors

SECRET RESERVES

How Secret Reserves Are Created

XII BALANCE SHEET AUDIT—LIABILITIES 221

Information Bankers Require
Position of Auditors
Determination of Liabilities
Distinction Between Liabilities and Capital
Accounts Payable
Trade Creditors
Liabilities for Goods Received on Consignment
Notes Payable
Mortgages
Bonds
Rules Which Govern Loans
Judgments
Interest Payable
Taxes
Water Rates, etc.
Insurance
Wages
Rent
Freight
Traveling Expenses and Commissions
Legal Expenses
Audit Fees
Employees' Profit-Sharing Plans
Damages and Other Unliquidated Claims
Coupons, Unused Tickets, etc.
Deposits
Unclaimed Dividends

CHAPTER PAGE

XIII BALANCE SHEET AUDIT—CONTINGENT LIABILITIES . . 247

Contingent Liabilities Defined
Liabilities Created After Date of Balance Sheet
Notes Receivable Discounted
Indorsements
Guarantees, Suretyship
Acceptances
Capital Stock Convertible into Bonds
Unfulfilled Contracts
Bond, Note, and Preferred Stock Stipulations
The Minute Book

XIV BALANCE SHEET AUDIT—RESERVES, CAPITAL, AND SURPLUS 267

RESERVES

CAPITAL STOCK

Balance Sheet Construction
Audit Procedure
No-Par Value Stock
Restrictions Affecting Transfers of Capital Stock
Stock Dividends
Premiums on Capital Stock

SURPLUS

Reserves for Retirement of Securities
Reserve for Working Capital
Reserves for Dividends
Investment of Surplus

XV THE INCOME ACCOUNT 290

CAPITAL AND INCOME

Form of Income Account
Proceeds of Sale of Treasury Stock
Dividends Must Not Be Paid from Capital
Wasting Assets
Decedents' Estates
Importance of Uniform Terminology in the Income Account
Importance of Income Account
Relation of Net Income to Price-Fixing
Legal Definition of Net Income
Economic Definition of Net Income
Accountant's Definition of Net Income

XVI THE INCOME ACCOUNT—REVENUES 311

Gross Income
Returns
Sales of Consigned Goods
Ordinary Transactions Only to Be Included
Allowances and Rebates

CHAPTER PAGE

Doubtful Accounts
Income from Work in Progress
Departmental Profits
Intercompany Profits
Income from Sales for Future Delivery
Participations and Underwritings
Income Arising from Sale of Capital Assets
Income from Royalties
Appreciation in Value of Assets

XVII THE INCOME ACCOUNT—EXPENSES AND LOSSES . . 324

Reserves
Depreciation
Obsolescence
Accrued Expenses, etc.
Trade Discounts
Cash Discounts

DISPOSITION OF NET INCOME

Dividends
Position to Be Taken by Auditor

XVIII CONSOLIDATED BALANCE SHEETS AND INCOME ACCOUNTS 335

Definition of "Subsidiary"

BALANCE SHEETS OF HOLDING COMPANIES

Importance of Correct Statement—Rediscounts
Form of Balance Sheet
Records in Books of Account
Guarantees of Subsidiaries' Obligations

INCOME ACCOUNT

Comparative Statements

XIX CERTIFICATES AND REPORTS 352

Something More Than Figures Are Wanted in a Report
Terminology
Scope of Report
Certificate of Audit
Form of Balance Sheet
Statement Required by Banks
New York Stock Exchange Requirements for Listing Securities
Federal Reserve Board Requirements
Statements Requested by Credit Managers
Forms Issued by Mercantile Agencies

XX CERTIFICATES AND REPORTS (Continued) 405

Liens and Hypothecations
Forms of Income Account

CHAPTER PAGE

GRAPHIC CHARTS

Use of Charts and Graphs
Essentials of a Good Chart
Types of Charts
Circle Type
Bar Type
Broken Line or Curve Type
Value of Comparative Statistics
What Not to Report
Restrictions on Client's Use of Reports
Misleading Advertisements
Compulsory Reports

XXI INVESTIGATIONS 423

SCOPE OF THE WORK

Instructions from Clients
Working Papers to Be Preserved
Detail Which May Be Omitted
Previous Audits
Where Assets Are Appraised
Definite Report Wanted
Handling Books and Records
False Entries Sometimes Forgeries
The Auditor as an Expert Witness

ON SALE OR PURCHASE OF A BUSINESS

(a) Requirements
(b) Period Covered
(c) Analysis of Earnings and Expenses
(d) Future Requirements and Economies
(e) System of Accounts
(f) Elimination of Unusual Items
(g) Adjustments and Qualifications
(h) Errors in the Books
(i) Investigation on Behalf of a Retiring Partner When the Business Is Being Sold to a Continuing Partner
(j) Investigation for Those in Charge of Reorganizations

XXII INVESTIGATIONS (Concluded) 470

INVESTIGATION ON BEHALF OF A PRESENT OR PROSPECTIVE CREDITOR

(a) Examinations for Bankers
(b) Investigations After Bankruptcy
(c) Investigation for Purely Credit Purposes
(d) Investigation in Patent Litigation

FRAUD

Possibilities to Be Studied
Extent of Fraud
Attitude Toward an Embezzler
Definitions

CHAPTER PAGE

XXIII THE DETAILED AUDIT 491

GENERAL PRINCIPLES

Completed Audit
Continuous Audit
Auditing by Tests and Scrutiny

THE AUDIT OF EARNINGS AND EXPENSES

General Principles
Prior Periods
The Accrual Method
Verification of Footings and Postings
1. Purchase Records
2. Sales Records
3. Cheques Received Must Be Deposited
4. Periodical Verification of Bank Balances
5. Cash Receipts
6. Cash Payments
7. Other Records

XXIV THE DETAILED AUDIT—VERIFICATION OF INCOME . . 515

Fraud Connected with Receipts

SALES

Importance of Original Records
Orders for Future Delivery
Consignments and Goods Out on "Memorandum"
Goods Received for Sale
Sales Not Delivered
Cash Discounts
Collections Not Accounted for
Confirmations of Outstandings

INCOME FROM INVESTMENTS

Interest Receivable
Rents Receivable

MISCELLANEOUS INCOME

Discount for Prepayment
Realizations from Items Previously Charged to Income
Sales of Building Lots
Services and Other Charges Billed in Advance
Income from Corporation's Own Issues

XXV THE DETAILED AUDIT—PURCHASES AND EXPENSES . . 538

VOUCHERS

Procedure
Paid Cheques as Evidence
Purchase Invoices
Internal Check
What Vouchers to Examine

CHAPTER PAGE

Irish Woolen Mill Case
Missing Vouchers
Vouchers for Petty Cash Payments, Pay-Roll, etc.
Journal Vouchers
Cancellation of Vouchers

MISCELLANEOUS EXPENDITURES

Repairs and Renewals
Allowances and Returns
Containers
Salaries
Salesmen's Commissions
Traveling Expenses, Entertaining, etc.
Wages
Customs Duties
Interest and Collection Charges
Insurance Premiums
Freight and Express
Postage
Legal Expenses and "Graft"

DEFERRED CHARGES

Allocation of Costs and Expenses
Doubtful Deferred Charges
Organization Expenses

XXVI THE DETAILED AUDIT (Concluded) 578

THE TRIAL BALANCE

Outstanding Accounts
Bad or Doubtful Accounts

ASSET AND LIABILITY ITEMS

Notes Receivable
Notes Receivable Protested
Inventories
Premiums and Discounts on Bonds to Be Amortized
Premiums on Capital Stock
Premium on Redeemable Preferred Stock
Branch Accounts
Capital Expenditure
Cash Discounts on Capital Payments
Real Estate
Buildings
Improvements and Extensions
Machinery, etc.
Notes Payable
Partners' Withdrawals
Dividends
Capital Stock
Bonds
Taxes

CHAPTER PAGE

XXVII OFFICE AND ACCOUNTING METHODS 600

OFFICE METHODS

Styles of Books and Records
Books as Evidence
Loose-Leaf Records
Erasures
Original Records Necessary
Mechanical Devices as an Aid to the Auditor
Work Which May Be Done with the Aid of Mechanical Devices
Filing Systems
Copying
Mailing Department
Stock on Hand
Controlling Subsidiary Ledgers
Columnar Ledgers
Efficiency of Organization

XXVIII DEPRECIATION 621

Causes of Depreciation
Repairs and Maintenance
Methods of Applying Depreciation in the Books
Sinking Fund Requirements to Retire Bonds, etc., Must Not Be Confused with Depreciation Allowances
Cost the Proper Basis
Depreciation Is an Operating Expense
Depreciation a Local Issue
Investment of Depreciation Reserves
Importance of Provision for Obsolescence
Depreciation of Different Classes of Property
Land
Buildings
Leaseholds
Machinery and Equipment
Small Tools
Furniture and Fixtures
Landlord's Fixtures
Horses
Wagons, Automobiles, etc.
Ships
Patents
Good-Will
Wasting Assets
Timber Lands

XXIX INTEREST 655

Principal
Rate of Interest
Time
The Unit Period

CHAPTER PAGE

XXX THE LIABILITIES OF DIRECTORS 665

Board Minutes' Inspection
Directors' Dealings with Company
Personal Liability of Directors
Compensation of Directors
Directors May Inspect Books
Legal Liabilities of Directors

APPENDIX A—UNIFORM ACCOUNTING 679

B—EXAMPLE OF PROVISIONS CONTAINED IN A PREFERRED STOCK AGREEMENT 706

FORMS AND CHARTS

Charts Showing Computation of Good-Will 199
Forms of Balance Sheets 367–369, 375
Federal Reserve Board Form of Balance Sheet 372–373
Information Blank—American Bankers' Association Form . . . 378–380
" " —Irving National Bank of New York . . . 382–385
Federal Reserve Board Form of Financial Statement for Manufacturing or Mercantile Business—Corporation 387–388
Federal Reserve Board Form of Financial Statement for Manufacturing or Mercantile Business—Partnership or Individual . . . 389–390
Federal Reserve Board Form of Financial Statement—Farmer or Other Individual 391–392
National Association of Credit Men's Form of Financial Statement . 395–396
The Bradstreet Company's Form of Financial Statement. . . . 398–401
R. G. Dun and Company's Form of Financial Statement . . . 402–404
Condensed Income Account 407
Condensed Profit and Loss Statement 408
Graphic Chart—Circle Type 411
" " —Bar Type 413
" " —Broken Line or Curve Type 414–415
Comparative Income Statement 440–441
Federal Reserve Board Form of Profit and Loss Account . . . 704–705

AUDITING

THEORY AND PRACTICE

VOLUME I

GENERAL PRINCIPLES

CHAPTER I

THE AUDITOR AND HIS WORK

The purpose of this book is to set forth the principles underlying the theory and practice of auditing and to outline the work which must be done in whole or in part in any audit. These principles embrace the fundamentals of business and finance; and the discussions, particularly of disputed questions, which are necessary to bring out the truth and to settle the standards of good accounting practice are of interest to those who do not, as well as to those who do, expect to engage in the actual work of an audit.

Qualifications of the Auditor

An ideal audit cannot be made without a full perspective of the science of accounts, for many who have a good working knowledge of the details of practical accounting find it difficult to visualize, as it were, the records of business transactions.

Analytical Ability.—The auditor who best accomplishes his task is he who is able to put himself in the place of those for whom the accounts are intended. He will not find this easy unless he has been trained to make the most of the figures which appear in a balance sheet or income statement. To present *correct* accounts is not enough, because correct accounts may not be clear to those for whom they are intended. A scientific system of accounts is a method whereby a graphic and intelligent record of facts may be assembled and by logical processes reduced to readable form.

Constructive Ability.—Auditing is the analytical, as practical accounting is the constructive, branch of accountancy; but the modern auditor is more than an analyst. The logical development of his profession and the increased appreciation of

the value of his work have added to his former duties certain constructive functions which must be fulfilled in connection with a large proportion of his engagements.

It has been suggested that accountants or auditors, to be of real value to their clients, must go so far afield as to make a study of the elements of labor direction and of production, among other things. Too often it has been urged that the average accountant has the mind of a bookkeeper, whose prime object is to balance accounts. A balance sheet merely shows results and cannot be fully understood or used unless what is back of the figures is intelligently studied. The study, however, must be orderly as well as intelligent. In the following pages an attempt is made to suggest what must be done in every case when a true balance sheet and income statement are desired.

Ability to Explain Facts.—The average business man has been trained from boyhood to read facts and figures from continuous printed pages. The trial balance of a ledger means nothing to him, except that part of it which contains the accounts receivable and payable, and these must not be called "debit balances" or "credit balances" if we would avoid the chance of being misunderstood.

Many intelligent people fail to grasp the usual and conventional hypothesis underlying the theory of double-entry bookkeeping; important facts or figures presented to them in a technical or formal shape may not accomplish the intended result. Therefore, the study of auditing is essential to those who desire to study business. It forces training in the fundamental essentials of every business. It also enables a business man to know whether an auditor whom he may later employ is doing his work properly.

Probably the majority of business men have been shown trial balances from their books which mean nothing to them. This applies to the usual monthly balance as well as to the one made after closing the books. A balance sheet in conventional form is

perfectly clear to the eye which is trained to read and understand figures, and is, perhaps, as concise and satisfactory an exhibit as could be desired *for the person who understands figures;* but thousands of business men frankly acknowledge that they do not grasp the full import of a financial statement in the accepted form.

But if the man who is entitled to know all the facts contained in these balance sheets cannot or will not understand this method of presentation, is it not our duty to try another form and keep on trying until the results of his business become as interesting *reading* to him as the daily trade reports? If the client had his own way he would ask for a report on his business prepared so that he could read it.

This is the point of view to which every accountant must direct his attention until he can so connect figures and transactions that an audit will no longer mean a mere verification of the figures in the books, but will include a lively appreciation of every ramification of the business. In other words, the auditor must visualize the transactions themselves to see that their conversion into dollars and cents is reflected in the books of account.

The proprietor knows intuitively all of the possible functions of his business; the auditor may not know them intuitively, but he must ascertain how and why the proprietor looks at the business as he does, otherwise there will be no meeting of the minds of the auditor and his client. Without a complete understanding of each other's point of view, ideal professional relations can never be maintained.

Experience and Training.—There are many ramifications of business affairs which cannot be understood without more or less actual experience and technical training, and which therefore cannot be satisfactorily elucidated within the limits of one book; but it is the firm belief of the author that a common-sense knowledge of bookkeeping and a general acquaintance with business affairs are the most necessary foundation of the student of auditing.

It is not to be expected that a clerk with a little knowledge of accounts or a business man with no practical experience in other lines than his own, can by a mere reading of these pages acquire at once the skill necessary for the professional accountant. Nevertheless, this book is intended for the instruction of those possessing but little experience as well as for the guidance of the qualified public accountant. Accountancy is a science, and it should be possible to present its underlying principles so that they may be comprehensible to the average mind. Theory alone, however, never qualifies anyone to practice as a public accountant any more than a medical student is qualified to practice medicine, no matter how thorough a knowledge of the science of medicine he may have acquired through lectures and books, unless he has had an opportunity to verify his book knowledge and demonstrate his skill in the hospital and the clinic.

If anyone who proposes to take up the study of auditing has not had a fairly thorough training in bookkeeping, and in addition has not had sufficient practical experience in business affairs to enable him to keep his poise when he is required to think and act quickly, he had better postpone his course until he has acquired enough experience to lay the necessary foundation. It is absurd for any student to take it for granted that a good memory applied to a book on auditing will make him a good auditor.

The work of the auditor engaged in public practice is important enough to raise this work to the dignity of a profession. It has been called the profession of business advice. Someone has defined a profession as a calling which demands of its members a high order of intellectual attainment, which can be acquired only by long and arduous preliminary training.

The man who expects to make a success as a public accountant must cultivate what has been termed "professional bearing." The expression, "professional bearing," is an inclusive term comprising such matters as neat and unobtrusive wearing apparel and dignified demeanor. It means courtesy in dealing with everyone, but excessive familiarity with none. It also includes the

exercise of the greatest discretion in remarks made relative to the affairs of clients and the assumption of an impartial unbiased attitude until all the facts in a particular situation are known.

Legal Responsibility of Auditors

In every profession there are some incompetent men and also a certain number, fortunately a limited number, of unreliable men. The process of weeding out such members of the profession is difficult but it is necessary if the professional standard is to be maintained or improved. In the author's opinion, one way to eliminate such men from practice would be to make them fully appreciate the civil responsibilities of a professional accountant. An incompetent man would hesitate to undertake important engagements if he were aware that failure to do the work properly might involve him in serious loss. The unreliable man is not apt to be deterred from any undertaking except by fear of punishment, and it is essential, therefore, that he also should understand well that he is not free from civil responsibility; but until the American courts lay down specific rules regarding the duties and obligations of public accountants, it is to be feared that the spectre of legal responsibility will not act as a deterring factor in the case of either incompetent or unreliable men. For the sake of the profession, therefore, it is desirable that such duties and obligations should be given a legal definition or decision, as it would result in the raising of the professional standard by the elimination or restraint of those who do faulty or fraudulent work. Such work on the part of a few undesirable men is apt to be given such notoriety that it far offsets the good work of ten times their number.

Trend of Legal Decisions.—There are numerous English decisions dealing with the rights and liabilities of professional auditors. In view, however, of the total number of accountants in practice and the period which the decisions cover, the number of these decisions does not seem appalling. While the fact

that we have only a few reported decisions speaks well for the integrity and good judgment of our accountants, yet it is believed that other occasions have arisen where litigation would have been resorted to had it not been known that judgments involving money damages would have been worthless so far as the possibility of collection was concerned.

It is unfortunate that anyone should be permitted to practice as a public accountant who, in case of gross negligence or malpractice, has so little financial responsibility that a judgment against him would be worthless, and who, moreover, is beyond the legal reach of his fellow practitioners, who at present have no opportunity to prefer charges against one who is neither a member of the national or a state society nor certified by a state board.

The cases decided uphold the principle of law that anyone who holds himself out to be skilful in any trade or profession, and who is negligent in the performance of what he undertakes, becomes responsible in damages for such failure. This civil responsibility is settled and cannot be debated, but it should not be passed over lightly and should be emphasized on all occasions. The measure of legal responsibility, however, is much too low for a conscientious accountant. The law requires of him only the skill of an ordinarily skilful accountant; the law gives him the privilege of assuming the accuracy of many things unless he has definite suspicions to the contrary; and, as already stated, the law never requires one to measure up to the standard of the most skilful in the same profession or trade. In this respect accountants are to be congratulated, for it is common knowledge that the majority of professional accountants in the United States seek to do more for their clients than the law requires, and every year witnesses a more general desire to improve the quality of services rendered.

It is earnestly hoped that further progress will be made in this direction. Since the wish for high standards is general, let each individual accountant do his part toward maintaining them.

Public opinion should be aroused so that unqualified practitioners will gradually cease to practice, and in their place a united body will control all accountancy matters—not because the law grants them exclusive privileges, but by reason of the fact that they can be depended upon at all times and under all circumstances, while the others cannot.

The common and statutory laws of Great Britain are prolific in decisions and enactments, prescribing with much exactness the precise nature of the liabilities which an auditor may conceivably incur while in the exercise of the multifarious activities incident to his profession.[1]

It is highly probable that in the event of any litigation of importance occurring here and involving that question, the courts of America will look to the English cases as affording, if not binding precedents, at least valuable guides to the considerations and principles of law applicable in such case.

Summary of Decisions.—Based upon the English decisions and upon the principles of the common law in force in the United States, the professional auditor's legal duties and liabilities may be summarized as follows:

1. Anyone who holds himself out as skilled in a profession is charged with a higher degree of responsibility than one who is inexperienced and who does not seek professional work. Acting in a professional capacity, an auditor must do more than ascertain the mere arithmetical accuracy of the accounts. If the accounts do not represent the true financial position of the undertaking under examination, and if that fact is apparent or can reasonably be deduced from the face of the accounts themselves, then the auditor is under a legal obligation to discover and disclose the true state of affairs.

2. The auditor, however, is not an insurer unless he assumes such a position. If he uses reasonable care—the care of an ordi-

[1] For English cases bearing on the liabilities of auditors, refer to *Auditing—Theory and Practice*, first edition.

narily skilful auditor, under the circumstances of the case—no legal responsibility is incurred by him.

3. Reasonable care has been stated by the courts to depend upon the circumstances of each case. Where there is no reasonable ground for suspicion of fraud, it is not necessary to take as many precautions as are requisite where the auditor is led to believe that irregularities exist.

4. Ordinarily what is known as a "test and scrutiny" audit is sufficient, but in every case there must be a careful survey of the assets, liabilities, income, and expenses, in order that the auditor may satisfy himself that the assets and the income are accounted for, and that the liabilities and expenses are properly supported. The auditor need not verify every item, but he must not omit any part of an audit which the custom of the profession decrees should be covered.

5. The experience of other practitioners and access to recognized authorities on the subject being available, a defense of ignorance of what is required in an audit will not save an auditor from responsibility for failure to follow settled rules of practice.

6. The general rule of the common law, that all men are considered honest until proved dishonest, may be observed by an auditor with respect to the staff of the client; but he is charged with an exceptional degree of diligence in recognizing indications of dishonesty on the part of those who occupy responsible positions.

7. An auditor's relation to his client is in the highest degree confidential, and he has no legal right to communicate with third parties (debtors or creditors) unless he secures permission to do so. If his position as auditor becomes incompatible with honesty, he may withdraw at any time, but he is not at liberty to disclose to outsiders the cause of his withdrawal.

8. In communicating with his client, however, the auditor is bound to disclose information (other than information which has been received in confidence), of whatever nature it may be,

which is of value to the client, and any suppression of material facts is at his own risk.

9. In the event of loss through an auditor's negligence, the client may recover damages against him. The measure of damages is the amount which the client or other interested party has lost as a legal consequence of the auditor's failure to perform his duty properly.

American Decisions.—In one American decision,[2] in which a municipality endeavored to recover from the public accountants the amount of its loss through a defalcation which was not disclosed by their audit of the accounts, the court's opinion, in part, reads as follows:

> Defendants represented themselves as expert accountants, which implied that they were skilled in that class of work. In accepting employment as expert accountants, they undertook, and the plaintiff had the right to expect, that in the performance of their duties they would exercise the average ability and skill of those engaged in that branch of skilled labor. They were employed to ascertain, among other things, whether any irregularities had occurred in the financial transactions of the city clerk, and, if so, the nature and extent of such irregularities. If, from want of proper skill, or from negligence, they did not disclose the true situation, they failed to perform the duty which they had assumed, and failed to earn the compensation which plaintiff had agreed to pay them for the proper performance of such duty. The work of an expert accountant is of such technical character and requires such peculiar skill that the ordinary person cannot be expected to know whether he performs his duties properly or otherwise, but must rely upon his report as to the thoroughness and accuracy of his work. . . . The City is entitled to recover back the amounts paid, upon proving that, through the incompetence or the negligence of defendants, the report was in substance misleading and false. . . . The damages claimed on account of the losses resulting from the defalcations of the clerk and the insolvency of his surety are too remote to be recovered, without showing the existence of special circumstances, known to defendants, from which they ought to have known that such losses were likely to result from a failure to disclose the true condition of affairs.

[2] *East Grand Forks v. Steele*, 121 Minn. 296; 45 L. R. A. (N. S.) 205; 141 N. W. 181; Ann. Cas. 1914 C, 720.

In another case[3] it was agreed that the accountant should frequently check a corporation's cash account and verify the items. The cash and agency accounts were not verified, resulting in the failure to discover losses due to the embezzlements and defalcations of a cashier.

In sustaining a counterclaim for damages against the accountant the court quoted from Cooley's "The Law of Torts,"[4] as follows:

> Every man who offers his services to another and is employed, assumes the duty to exercise in the employment such skill as he possesses with reasonable care and diligence. In all those employments where peculiar skill is requisite, if one offers his services, he is understood as holding himself out to the public as possessing the degree of skill commonly possessed by others in the same employment, and if his pretensions are unfounded, he commits a species of fraud upon every man who employs him in reliance on his public profession. But no man, whether skilled or unskilled, undertakes that the task he assumes shall be performed successfully, and without fault or error. He undertakes for good faith and integrity, but not for infallibility. . . .

and said, "Had an examination and checking of the New York office cash account, performed with that degree of skill demanded by the rule which has been noticed, resulted in preventing defendant's loss, in whole or in part, the plaintiff (the accountant) should respond in damages."

Professional Ethics

Serious consideration has been given by the American Institute of Accountants to the advisability of adopting definite rules as a guide to the practicing accountant and as notice to the business world that the professional accountant, like the lawyer and doctor, adheres to rules of professional ethics. With this end in view, the Council of the American Institute has approved the following rules:

---

[3] *Smith v. London Assurance Corporation*, 109 App. Div. 882; 96 N. Y. Supp. 820.

[4] Second edition, page 277.

RULES OF AMERICAN INSTITUTE.—Rules of professional conduct, including amendments and additions prepared by the committee on professional ethics and approved by the council prior to September 30, 1920:

(1) A firm or partnership, all the individual members of which are members of the institute (or in part members and in part associates, provided all the members of the firm are either members or associates), may describe itself as "Members of the American Institute of Accountants"; but a firm or partnership, all the individual members of which are not members of the institute (or in part members and in part associates), or an individual practising under a style denoting a partnership when in fact there be no partner or partners, or a corporation, or an individual or individuals practising under a style denoting a corporate organization, shall not use the designation "Members (or Associates) of the American Institute of Accountants."

(2) The preparation and certification of exhibits, statements, schedules or other forms of accountancy work, containing an essential misstatement of fact or omission therefrom of such a fact as would amount to an essential misstatement, or a failure to put prospective investors on notice in respect of an essential or material fact not specifically shown in the balance sheet itself, shall be, *ipso facto*, cause for expulsion or for such other discipline as the council may impose, upon proper presentation of proof that such misstatement was either wilful or the result of such gross negligence as to be inexcusable.

(3) No member shall allow any person to practise in his name as a public accountant who is not a member of the institute or in partnership with him or in his employ on a salary.

(4) No member shall directly or indirectly allow or agree to allow a commission, brokerage or other participation by the laity in the fees or profits of his professional work; nor shall he accept directly or indirectly from the laity any commission, brokerage or other participation for professional or commercial business turned over to others as an incident of his services to clients.

(5) No member shall engage in any business or occupation conjointly with that of a public accountant, which in the opinion of the executive committee or of the council is incompatible or inconsistent therewith.

(6) No member shall certify to any accounts, exhibits, statements, schedules or other forms of accountancy work which have not been verified entirely under the supervision of himself, a member of his firm, one of his

staff, a member of this institute or a member of a similar association of good standing in foreign countries which has been approved by the council.

(7) No member shall take part in any effort to secure the enactment or amendment of any state or federal law or of any regulation of any governmental or civic body, affecting the practice of the profession, without giving immediate notice thereof to the secretary of the institute, who in turn shall at once advise the executive committee or the council.

(8) No member shall directly or indirectly solicit the clients or encroach upon the business of another member, but it is the right of any member to give proper service and advice to those asking such service or advice.

(9) For a period not exceeding two years after notice by the committee on ethical publicity no member or associate shall be permitted to distribute circulars or other instruments of publicity without the consent and approval of said committee.

(10) No member shall directly or indirectly offer employment to an employee of a fellow member without first informing said fellow member of his intent. This rule shall not be construed so as to inhibit negotiations with anyone who of his own initiative or in response to public advertisement shall apply to a member for employment.

(11) No member shall render professional service, the anticipated fee for which shall be contingent upon his findings and results thereof.

The student of accounting and the young practitioner should familiarize themselves with these recommendations and keep informed regarding the development of rules of ethics of the profession.

Action of Institute of Chartered Accountants.—In the annual address delivered April 5, 1916, Sir Woodburn Kirby, President of the Institute of Chartered Accountants in England and Wales, said that charges of unprofessional conduct had been made and investigated with the result that in four cases members were suspended from membership for advertising; in one case a member was suspended for holding himself out as qualified to act under a certain statute when he was not so qualified; in one case a member was suspended for acts of default in his statutory duties under an Act of Parliament; in one case a member was suspended

for falsely certifying to the conditions of service of an articled clerk.

TENDENCY IN UNITED STATES.—As an indication of the tendency in this country to hold the accountant strictly responsible, the following extracts from an editorial in the *Journal of Accountancy*, January, 1918,[5] are worthy of consideration:

> The accountant who acquiesces in any attempt at evasion of taxes is a criminal in the moral, and, if detected, in the legal sense.
>
> Of course, it is the duty of every accountant to safeguard the true interests of his client. We are speaking now of those who might seek to serve interests which would be untrue and unworthy.
>
> Speaking for the American Institute of Accountants, it may be well to impress upon members and associates the fact that the organization stands firmly for right, and if any attempt on the part of a member or associate to evade the full extent of taxation measures is brought to the attention of the institute, discipline will certainly follow without delay or mercy.

These rules may appear to be severe but in many cases courts have held that the recognized professional standards of ethics for lawyers apply even in the absence of state statutes. The legal code of ethics does not permit a lawyer to advertise, and one court has decided that a lawyer who solicits a case cannot recover for his services.[6]

REPORT OF ONE STATE SOCIETY.—A committee of one of our state societies in a report on "Proposed Rules of Ethical Conduct" reported, in part, as follows:

> The most worthy and effective advertisement possible, even for a young accountant, and especially with his brother accountants, is the establishment of a well merited reputation for professional capacity and fidelity. This reputation cannot be forced, but must be the outcome of character and conduct. The publication and circulation of ordinary

[5] Volume xxv, pages 48 and 49.

[6] *Ingersoll et al. v. Coal Creek Coal Company et al.*, 117 Tennessee Reports, 263.

simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not per se improper. But solicitation of business by circulars, or advertisements, or by personal communications or interviews, not warranted by personal relations, is unprofessional. The accountant should not purchase any interest in the subject matter or business of any client. The magnitude of the interests inspected by certified public accountants, the importance of the accountants' positions, and all other like self-laudations lower the tone of our high calling and are intolerable.

In the foregoing discussion regarding professional ethics it may appear that undue importance has been attached to violations of those rules of ethics or conduct relating to advertising or other practices affecting, to a large extent, the accountants' interests only. If this impression is received, it must not be inferred that it represents the author's point of view. He does not condone the violations of those rules of ethics intended to discourage advertising or other forms of solicitation; but he realizes that they are, in the last analysis, violations of good taste only, while the infractions of those rules covering relations with the clients or with the public are the really serious departures from correct professional conduct.

To prevent such infractions, he would emphasize the importance of developing to the highest degree the feeling of moral responsibility on the part of accountants, and he would urge an even wider conception of moral responsibility than the avoidance of violations and the penalties which attach to them. Moral responsibility is all-inclusive: it covers relations with the clients—to do good work; relations with the investor or lender—to make every statement so full and complete that it cannot be misunderstood; relations with the business community—to devote his ability and energy to the improvement of business practices; relations with the fellow members—to deal with them honorably and unselfishly; relations with the staff—to provide opportunities for their self-improvement and advancement. The really important work of the accounting societies can be directed toward the

growth of this feeling of moral responsibility. In making this statement it should not be thought that the author is charging the societies with negligence in this respect—his purpose is simply to stress the importance of the constructive side of their work and its possibilities, as compared with their regulatory activities.

CHAPTER II

THE PURPOSES OF AN AUDIT

The average business man is not as familiar with the purposes and advantages of an audit as he should be. A number have retained professional auditors and have gained their impressions of what an audit should be from the experiences growing out of such employment.

A Constructive Program

The program of an auditor is based largely on accumulated experience and the proper application to a given subject of such part of the experience as will do the most good. Conversely, those who are to be audited—officers of corporations, business men generally, and all those charged with the management or supervision of accounts and finance—profit greatly if due consideration is given to the mistakes and failures of others; a survey of the purposes and advantages of an audit will suggest to them new lines of thought, possibilities of greater efficiency and economy, the overwhelming value of trustworthy records so that remedial measures may be adopted in advance rather than after the visit of a professional auditor.

The Purposes of an Audit

The successful auditor is the best medium through which the business public will gain knowledge of the advantages of an audit. To be successful the auditor himself must have a thorough and definite grasp of the purposes of an audit.

The following observations and suggestions are based upon a careful study of actual conditions and may be relied upon by the student as representative of the accumulated experience of the auditors who head the profession at the present time.

THE FORMER POINT OF VIEW.—In what might be called the formative days of auditing, students were taught that the chief objects of an audit were:

1. The detection or prevention of fraud
2. The detection or prevention of errors

but in recent years there has been a decided change in the demand and in the service. Financiers and business men who originally retained professional auditors to look for fraud or errors have enlarged their demands and now require a vastly broader and more important class of work, which those auditors who have advanced in skill and knowledge have been able to understand and perform. We must therefore relegate the former "chief objects" to a subordinate position without in any way depreciating their importance.

THE PRESENT-DAY POINT OF VIEW.—The relative positions of the present-day purposes are:

1. To ascertain the actual financial condition and earnings of an enterprise for:
   (a) Its proprietors (partners or stockholders).
   (b) Its executives (managers, officers, or directors).
   (c) Bankers or investors who are considering the purchase of its securities.
   (d) Bankers who are considering the discounting or purchasing of its promissory notes.
2. To detect fraud or errors, as explained in later chapters of this book.

OBJECTS TO BE ACCOMPLISHED.—The results secured by auditors are required for the following, among other purposes:

1. In order that stock and bond holders or other owners or creditors may have submitted to them at regular intervals a comprehensive, even though a condensed, statement of the

financial position and the net results of the operations of the business in which they have a proprietary interest, and that the fairness and accuracy in all essential particulars of the statement submitted may be attested by means of a certificate or report of a disinterested and competent authority.

2. Upon a proposed sale or incorporation or other change in form or management, such as an attempt to bring in additional capital, or the death of a partner or large stockholder. Matters of the highest importance arise in connection with the interests of partners in the event of death or other change in the partnership relations.

3. To submit similar statements in more detail to banks and note-brokers as a basis of credit.

4. To submit certified statements to the mercantile agencies and to other organizations which call for periodical reports.

5. To ascertain the true causes of fluctuations in profits or expenses.

6. To state the facts in disputes or litigation, and to investigate the causes of bankruptcy for creditors or stockholders.

7. To prepare in whole or in part reports to governmental bodies or departments for taxation or other purposes.

8. To guard against losses due to inadequate records and poor methods, lack of internal check or carelessness.

9. To protect the public through the examinations of governmental departments, public utilities, and private corporations when accurate information is required for voluntary or involuntary price-fixing.

This is a partial list only of the manifold purposes for which audits or investigations are being demanded. The nineteenth century auditor who looked chiefly for fraud or errors served a useful purpose, but his methods now illustrate the history rather than the modern practice of auditing.

Due consideration will now be given the subject of fraud and errors. In subsequent chapters the present-day demands for

"higher" auditing will be met with a full discussion of the more important work of the professional auditor.

The Minor Objects of an Audit

The elementary or minor objects of an audit are:

1. The detection of fraud.
2. The detection of errors, and conversely the prevention of fraud and the prevention of errors, particularly of errors of principle.

In addition there is the moral effect of an audit, tending to keep the work of the office staff sharply up to date. This might be classed as a constructive object.

1. The Detection of Fraud.—There can be no doubt but that the business public look upon the discovery of fraud as an important object to be attained by an audit, and experience has demonstrated that sufficient fraud has been so disclosed to warrant a continuance of the service of auditors who are retained to discover fraud if it exists.

Gradually, however, the business man is being educated to understand that the discovery of fraud is but one of the objects of an audit, and by no means the most valuable to him.

The detection of fraud is first in the logical presentation of the objects of an audit, because less experience is required to unearth it, and more definite suggestions can be made to the student in regard to it than is true of the more important branches of the auditor's duties.

While an auditor who brings to bear all of his skill and resources, and who leaves no stone unturned in his search for fraud, but fails to discover a well-concealed defalcation, is legally exempt from liability therefor, yet he is, and properly should be, considered professionally responsible for such failure, and his practice suffers accordingly. Therefore particular attention must be paid to all possible avenues which are open to the dishonest

clerk or official who has an opportunity to manipulate the records of business transactions.

Opportunities for wrong-doing vary, as a rule, with the size of the undertaking. In a small business the details are apt to be supervised by one or all of the proprietors, while in a large business much of the detail is necessarily left to subordinates. The auditor must be governed by the circumstances surrounding each engagement and then determine the amount of detail to be covered.

(a) *Misappropriation of Money or Goods.* Usually fraud consists of defalcations involving the misappropriation of cash, either by the failure to account for cash receipts or by the entry of payments which are fictitious in part or in whole.

In the following pages is outlined a procedure based on long experience which will disclose such practices in all ordinary cases.

With respect to the misappropriation of assets other than cash, a far more difficult task is at hand, but experience in such cases has also permitted the outlining of general rules which will materially assist the auditor.

(b) *Manipulation of Accounts for Other Purposes.* The abstraction of cash or of goods is not the only reason for the manipulation of accounts. The auditor who has fully covered these two classes of frauds must, in addition, consider the possibility of other irregularities.

In many undertakings the sources of cash receipts and the disposition of cash expenditures are so carefully guarded that a misappropriation of cash is almost impossible.

It is hard to convince the business man whose accounts are so guarded, that an audit is of value; but, relying again on experience, it has been demonstrated time and again that pecuniary profit in such cases may be obtained by the manipulation of records. Usually the fraud has been perpetrated by an official (frequently one who has the entire confidence of everyone) who has an interest in, or who receives a bonus based on, the net

profits of a business or of a department thereof. In other cases the purpose is to deceive bankers, creditors, or stockholders.

The auditor must have all these purposes constantly in mind when determining his course of action. If he does not consider all the elements involved before commencing a given engagement, he may find at the end of a detailed audit that a balance sheet audit would have enabled him to secure satisfactory results in much less time.

In discussing hereafter the respective advantages of these two classes of audits, the author will endeavor to assist the practitioner in the selection of a proper line of procedure.

2. The Detection of Errors.—When professional auditing was in a formative state in this country, auditors were frequently engaged to adjust accounts which had been kept badly by inefficient clerks. It was found that the books were not in balance, and that in order to adjust them a vast number of errors had to be located and corrected. In many cases this work consumed months, and a correspondingly large fee was asked. This was called "auditing," but in reality it was *accounting* work of the most elementary kind. A careful bookkeeper unacquainted with most of the principles of accountancy could have performed the service equally well and far more cheaply.

This practice cast more or less discredit on professional auditors, so that the tendency during recent years has been to belittle the importance of locating errors in books of accounts and to magnify the advantages of concentrating on the search for fraud and the verification of the balance sheet.

The author feels that this branch of auditing should be accorded its proper place in stating the objects of an audit, and the attention of the student is particularly called to the points of importance in the detection of errors.

(a) *Errors of Principle.* This is the most important class of errors and is one which the auditor must never overlook.

Errors of principle usually affect both the income account

and the balance sheet. The most common error is to debit an asset instead of an expense account. For instance, an item of repairs will be charged to buildings account, or a payment covering expenses or services will be charged to the personal account of the payee and thus be included among the accounts receivable, instead of being charged to an expense account.

Other errors of principle do not affect the net income, but may seriously affect the conclusions which are drawn from the various revenue or expense accounts. For instance, an executive may have determined that the advertising appropriation shall be limited to 5 per cent of the sales. A large item of advertising expense may be charged to some other expense account in error, with the result that the executive, depending upon the ledger to give him the total expenditure, will authorize additional advertising and thus incur an unintentional and perhaps unnecessary expense.

Errors of principle are most easily detected by making an intelligent analysis of the accounts in connection with the preparation of the income account and the balance sheet.

(b) *Clerical Errors.* These are the most frequent errors which exist, and, unfortunately, few books of accounts are free from them. They consist of errors in the footings and forwardings of the books of original entry and ledgers; errors in postings other than those mentioned under (a), consisting of postings to wrong accounts in the same class, as to one customer or creditor instead of another, or the posting of an incorrect amount, posting to the wrong side of the ledger, or errors in drawing off the trial balance.

These errors are usually due to carelessness, but the auditor is not justified in assuming that accounts in which such errors exist are free from fraud. He must differentiate between clerical errors and intentional manipulation of the records. A careful examination must therefore be made of enough of these errors to enable the auditor to satisfy himself that they are bona fide. For instance, an excessive footing of a pay-roll or expense account might be due to either carelessness or fraud; the posting of a

greater amount to the credit of a customer's account than is shown in the cash book might be an honest error in posting or it might indicate an attempt to conceal a defalcation.

A fair test of these errors, however, is sufficient. It is no part of an auditor's duty (as such) to locate all clerical errors, and the auditor who devotes too large a part of his time to this work lays himself open to just criticism.

Auditors lose sight of the fact that the closing of books and the resulting balance sheets are based on estimates only. Some auditors spend many hours in adjusting balance sheet items in order to correct a few trifling errors, when there are valuations of hundreds of thousands of dollars in plant, merchandise stocks, etc., all of which are necessarily estimates and which fluctuate from day to day—as must the value of all materials and goods. So long, therefore, as small errors in calculations, extensions, etc., do not, relatively speaking, actually affect the balance sheet, time should not be wasted on such adjustments.

(c) *Errors of Omission.* An auditor is justified in spending more time in looking for errors of omission than in connection with any other class of errors. Where the internal check (see page 62 *et seq.*) is not perfect, the utmost care must be taken to verify all possible sources of revenue, to ascertain whether or not all such items are entered in the books. Errors of omission usually do not affect the trial balance and are therefore not detected automatically. They are to be distinguished from the class of errors where items are not posted at all, because these (except where both sides of a journal entry are not posted) affect the trial balance, and the usual checking back of the postings would locate the differences.

Instances of errors of omission are: goods may be delivered, but not billed; rent due may not be charged or collected. On the other hand, purchases may be made and the goods received, but the invoices for same may not be entered in the books. In order to cover this class of errors the auditor should locate all books of original entry, whether they are so-called memorandum books or

other informal records, and a fair selection of items then should be traced into the regular books of account. If the test does not disclose any material differences, it may be assumed that the records are accurate. If the test should disclose one or more errors of sufficient size to affect the results favorably or unfavorably, a more extensive test should be made. It might be well, however, before extending the verification, to request authority for so doing from the client.

In an examination of the accounts of a publisher the author compared the advertisements appearing in one issue of a popular magazine with the book in which charges to advertisers were entered. It was found that an insertion of a full page had not been charged for. The item was billed and collected. Thereupon the other eleven issues were carefully checked, but no other omission was found.

If the auditor names a fixed fee for an audit, it is always well to state that tests only will be made. If an error is discovered in the test, the auditor has fulfilled his agreement and need not go further unless an additional fee is arranged for. If he will broach the subject as soon as the test is completed, there will probably be no difficulty in securing an extra allowance, but if no reference is made to his purpose to charge extra for additional work, he will usually have difficulty in collecting anything at all additional, no matter how many or how few errors are brought to light.

(d) *Errors of Commission.* These occur chiefly in books and records of original entry, and consist of items which are incorrectly recorded, either in whole or in part.

For instance, an entry in the sales book may be incorrect as to quantities, or in the extension of the items. These errors do not affect the trial balance and frequently remain undetected.

The same tests as are recommended above, under (c), should be followed, except that it is not usually necessary to cover as many items. Calculations of purchase and sales items are frequently verified by two persons in the offices where they originate, and almost invariably are checked in the offices to which they

are sent. The test, therefore, may be extremely limited, provided it is apparent that care is taken by the clerks in charge of such work.

(e) *Offsetting Errors.* These occur fairly often, and while they could be classed under the other headings mentioned, they are dangerous enough to deserve special mention.

An offsetting error is one which is counterbalanced by another error or errors. It is an annoying type. As one error may occur in an asset or liability account and the other in an expense or income account, an auditor is not justified in passing any accounts until satisfied that such errors do not exist. Of course, this does not mean the verification of every posting, but it does call for the tests or analyses described more fully hereafter.

Few executives realize how great is the number of clerical errors which are made every day. Perhaps these are most numerous in banks, brokers' offices, and other offices where the accounts are balanced daily. An immense amount of work is accomplished in a short space of time. Clerks work at high pressure, and, knowing that there will be a check on their work before they leave at night, they do not verify their entries as they go. This is the case with many clerks who depend on the monthly trial balance to detect their errors. Consequently a great number of errors are made, but as soon as it is found that the day's work must be checked back, they are located and corrected. Many of these errors are of $10, $100, or $1,000. It is not strange, therefore, if two errors of the same amount are made on the same day in different departments, so that the accounts for that day actually balance in spite of the two errors.

The author was once called upon by the senior partner of a large stock exchange house who was greatly troubled by the fact that two errors of $100 each had been made on a certain day and had remained undetected for three weeks. He felt that something was wrong with the system of accounts or with his clerks; he could not decide which. He was advised that the discovery and reporting of the mistake by the only clerk who could have benefited

by it indicated that fraud was not intended, but that if a similar case arose soon again, a fuller investigation should be made.

The rule, therefore, is that an offsetting error may occur at any time, but that the law of averages operates against much duplication.

CHAPTER III

ADVANTAGES OF AN AUDIT

An auditor's duty is to discover and disclose the truth about accounts, but this is too general a designation of his duties to use when confronted with a specific case. Furthermore, the business world must, for many years to come, be educated to a proper appreciation of an accountant's functions; therefore the present-day auditor must be a teacher as well as an adviser. He must be prepared to explain the *purpose* of his work and set forth clearly the *objects* to be attained as the result of his labors.

Verification of Balance Sheet

The professional auditor must give the impression of having a scope and purpose far in advance of the old-time auditor, whose work was chiefly confined to ascertaining whether the accounting party had properly recorded all receipts and payments on behalf of his principal. In fact, the old-fashioned audit was a cash audit. A modern audit, however, although it includes the examination of cash transactions, has as its ultimate purpose the verification of the balance sheet.

An auditor should be prepared to state that he must make such an examination of the books and records of the undertaking as will enable him to satisfy himself as to whether the balance sheet is properly drawn up to exhibit a true and correct statement of its financial affairs.

Promptness Essential.—The auditor should endeavor to complete his examination and present his report within the shortest possible time after the client's accounts have been closed, in order that his report may be a current event, and therefore of

immediate and vital interest rather than a matter of history too ancient to be of any practical use. If the delay is due to the auditor's neglect or inexperience, obviously he is not to be excused.

In any event, we must realize that the principal purpose of financial statements is to ascertain the condition of the enterprise and to determine policies to maintain or increase the profits. If the reports are completed a long time after the close of the period, say, two or three months, it is quite possible that some expenses or losses may have been incurred which could have been eliminated. It is common knowledge that some large enterprises have so arranged their work that the results are known in a few days after the close of the fiscal period. There is no reason why many other concerns cannot do likewise. In such cases the auditor can complete his work in time to be of real value.

Major Advantages

The chief advantages of an audit are, of course, identical with its main purposes. The minor objects, viz., that fraud will be disclosed if it exists; that technical errors, if any, will be discovered and corrected; that errors of principle if they exist, will be detected, and the means of preventing their repetition in the future pointed out, have been discussed.

The major advantages which have been mentioned will now be enlarged upon.

1. Condition of Affairs.—An accurate balance sheet, together with an income statement, reflecting the changes in the company's financial position, are prepared by a disinterested expert. In a great number of cases these statements made by the auditor are the first accurate information which the client has had as to his condition. It will never be known how many enterprises have been saved from ultimate failure through the presentation of unwelcome facts by an auditor who

cannot and will not be influenced by former inaccurate statements of condition.

The tendency to fool one's self has been so strong and so general that the ordinary balance sheet in the pre-war period, when subjected to investigation by a disinterested third person, required drastic treatment. Except in the comparatively few cases where special reason existed for understating values or understating profits, most business men were unwilling to provide sufficient depreciation, they were unwilling to cut down inventory values, and they were reluctant to provide sufficient reserves against accounts receivable. They insisted on carrying "souvenirs" as perfectly good assets, and they borrowed large sums of money on the strength of such souvenirs. This tendency was so general that most bankers in scrutinizing balance sheets mentally calculated additional reserves against the assets mentioned. The result was that the conservative business man who had provided sufficient reserves suffered the penalty of having, in effect, his actual current assets reduced because the non-conservative man had neglected to provide sufficient reserves.

As almost every item of a balance sheet affects directly or indirectly the computation of taxes, it is obvious that the greatest single factor which has ever influenced balance sheets was the federal excess profits tax, which became effective as of January 1, 1917.

Generally speaking, balance sheets are accurate when tax rates are high and profits are substantial. It cannot be said that the average balance sheet is accurate when tax rates are low or when tax rates are high and profits are not substantial. This refers to the balance sheet as it is made up without supervision or certification from an outside source.

American men as a rule are optimists. Furthermore, it is entirely in keeping with human nature if a proprietor or managing officer sets forth the most favorable aspect of the concern which he owns or manages. Therefore, accountants in the past have been confronted with balance sheets which the proprietors

honestly believed could be fully substantiated as to values, and it was difficult for the impartial investigator, who took a different view of some of the items, to convince the client that he, the auditor, was right, and that the client had not been sufficiently conservative. While it may be human nature to present the best aspect of affairs, it is also human nature to take advantage of circumstances which tend to increase profits or save expenses. As has been remarked heretofore, the levying of very high taxes, the amount of which was influenced very greatly by a conservative, but proper attitude as respects the accounting application of business items, has been a factor of very great weight in bringing down balance sheets and income accounts to a safe and conservative basis. High taxes have simply encouraged the attitude of conservatism which should always have obtained because the successful business man is a man who does not fool himself and such a man would very naturally be in favor of very liberal depreciation, would scale down the inventories where necessary to do so, would charge an expenditure to operating expense rather than to fixed assets if there were any option, would look with doubt upon the capitalization of intangible items or the deferring of expenses to future periods, and generally, would be correct but conservative in all accounting matters.

While self-interest during the period of high taxes tends to encourage the preparation of statements on a very conservative basis, should not the bankers in future years, if they want to avoid bad loans, insist that balance sheets be prepared in the same manner even though reduction in taxes payable may no longer be the actuating motive?

Every bank which loans money should classify the balance sheets of its borrowers and not consider that each one should be expected to tell its own story. Management is just as important as capital and a balance sheet can and should reflect management. The war balance sheet may show large net worth but it does not necessarily reflect good management, because large profits were made by the majority of the concerns. Anyone could make

money in most industries during war times because demand exceeded supply.

2. BANK LOANS.—Certified accounts are particularly valuable as a basis for bank loans. All leading bank managers recognize the assistance rendered to them in the course of their business by public accountants. The officers of the federal reserve banks have gone on record as favoring borrowers whose balance sheets are certified to by "outside" accountants. Even if a business man is in the happy position of not requiring occasional aid from his banker, his financial rating is considerably higher if he is thoroughly up-to-date in the care of his books and accounts.

The extension of credit by a bank depends on the judgment of its officers as to the ability of the borrower to repay the loan when due. The auditor, by reason of his independence, is able to assist the banker in forming his judgment. The prospective borrower cannot view the condition of his own business without bias. Borrowers usually do not anticipate difficulty in securing extensions of time, or anticipate future conditions to be more satisfactory than is the case at the time of the application. The auditor must, in a measure, pass on the probability and the possibility of the future in the light of past results.

This does not excuse an auditor who estimates a definite profit for the future, out of which a bank loan will be paid, but it does support the recent statements of prominent bankers that the services of professional accountants are becoming of increasing value to them, largely because they are able to *report orally* the result of their "sizing up" of the borrower or the prospective borrower.

If an auditor refrains from expressing any oral opinion on the probabilities of the future of a business, the accounts of which he has just subjected to the most thorough analysis and scrutiny, it is possibly because he relies upon the ancient fiction that an accountant deals with facts only, and that future results are not facts; or perhaps he is afraid to express his own convictions.

When an experienced auditor arrives at conclusions based on facts, it would seem only fair that his conclusions should be communicated to his client *at the time* they are formed.

It is an unquestioned advantage for any borrower to be able to comply with the requirements of the banker or note-broker to whom he applies for a line of credit. The attention of a prospective client may therefore be properly drawn to the official action of the supreme body of American bankers.

At the convention of the American Bankers' Association, held at Denver, Colo., in 1908, the Committee on Credit Information reported, urging "that every member exert his influence to have all paper purchased from note-brokers presented with accompanying statements audited by Certified Public Accountants. . . .," and to that end asked that the association, by the adoption of the committee's report, "recommend that its members, in purchasing commercial paper from note-brokers, give preference to such names as furnish accompanying statements audited by Certified Public Accountants."

Prominent bankers, from time to time, have urged their associates in conventions and elsewhere to require all prospective borrowers to furnish certified statements.

Unfortunately, competition in banking circles is still too keen to permit this rule to be adopted. Some recent large losses by banks, arising out of gross overvaluations of assets and understatements of liabilities on the part of borrowers, may incline them to require statements certified by impartial accountants.

3. Partnerships.—Partnership books should always be adjusted by a professional accountant, if for no other reason than that he will act impartially and comply fully with the articles of copartnership. These accounts are peculiarly liable to disturbances by causes from which corporations on the whole are exempt. Disputes occur as to salaries, division of profits, partners' overdrawings, inattention to business, and many other things which would to a large extent be obviated if the books

were regularly audited by a competent outsider. A partner dies and there is trouble with his administrator as to the division and withdrawal of the decedent's capital, in many cases resulting in expensive lawsuits and the permanent crippling of the business. A partnership goes into bankruptcy, perhaps through misconduct of a trusted partner. Had a continuous audit been in force the fraud might have been nipped in the bud. Again, for the protection of a limited or special partner, or of a silent or dormant partner, a periodical independent audit is essential.

4. Fire Loss.—In case of loss of merchandise by fire, a properly authenticated balance sheet prepared by a public accountant is a material aid in the adjustment of claims. This is not a theory; it has been demonstrated in practice. All business men anticipate the possibility of a fire, but few of them consider just how they will collect their insurance.

During the progress of an audit the auditor should ascertain the methods of bookkeeping in force, and whether, in case of fire, the records would be properly protected. He should ascertain whether a perpetual inventory is maintained or whether it will be necessary to calculate the amount of the loss upon the usual basis, that is, to take the last recorded inventory, add purchases to date of fire, and deduct cost of goods sold, the result being the stock on hand at time of fire.

The cost of goods sold is most often ascertained by deducting from the sales the average gross profit realized in prior periods. Fire insurance adjusters are shrewd and experienced, and the business man whose records are in poor order is usually forced to settle upon a basis satisfactory to the adjuster. If the business man's accounts are in good shape and if he can show that the last inventory has been certified to, he can decline to compromise and can insist on the full amount of his claim being allowed.

5. Bonding.—A cashier whose books are audited regularly has little trouble in securing a good company to act as surety for

him; in fact, several of the best companies insist, as part of the contract, that this be done periodically.

6. Protection of Stockholders and the Public.—The interests of the real proprietors of a business (the stockholders in the case of a corporation) should be protected in every feasible and reasonable manner.[1] One way in which such an end might be served would be to conform to the English method. There, stockholders at the annual meeting elect a professional accountant as the auditor of the company for the ensuing year. His report is made to the stockholders, not to the officers and directors.

A corporation which has nothing to hide cheerfully sends its balance sheet to its stockholders, and if the latter exhibit enough interest in the matter to request that the certificate of a professional auditor be attached, such request will probably be complied with. Therefore, in every possible and dignified way, the auditor should impress upon stockholders the many advantages to themselves of such procedure.

The value of the publicity given to audited accounts cannot be overestimated. In a general way the uninformed public believes all corporations to be making unreasonable profits, particularly

[1] In New York State legal protection is made possible by the following provision in the statutes:

Financial Statement to Stockholders.—Stockholders owning five per centum of the capital stock of any corporation other than a moneyed corporation, not exceeding one hundred thousand dollars, or three per centum where it exceeds one hundred thousand dollars, may make a written request to the treasurer or chief fiscal officer thereof, for a statement of its affairs, under oath, embracing a particular account of all its assets and liabilities, and the treasurer shall make such a statement and deliver it to the person presenting the request within thirty days thereafter, and keep on file for twelve months thereafter a copy of such statement, which shall at all times during business hours be exhibited to any stockholder, demanding an examination thereof; but the treasurer or such chief fiscal officer shall not be required to deliver more than one such statement in any one year. The supreme court, or any justice thereof, may upon application, for good cause shown, extend the time for making and delivering such certificate. For every neglect or refusal of the treasurer or other chief fiscal officer thereof to comply with the provisions of this section he shall forfeit and pay to the person making such request the sum of fifty dollars, and the further sum of ten dollars for every twenty-four hours thereafter until such statement shall be furnished." (Stock Corporation Law, Section 69.) Leading case, *French v. McMillan*, 43 Hun 188 (1887).

all corporations which in any way attempt to serve the public. For instance, in New York City, the taxicab companies were attacked in the newspapers and one ordinance after another was passed regulating fares, all, of course, reducing them. In a few years, at least two millions of dollars were lost by three or four of these companies. During that time they did not make periodical statements to their stockholders nor to the public setting forth their losses and the reasons therefor. For some mysterious reason publicity was shunned. It is about as certain as anything can be that if certified statements of operations had been secured and sent to the newspapers annually, a far different state of public opinion would have resulted.

Corporations which are secretive about their accounts or which issue statements not certified to, have only themselves to blame if they are made the victims of hostile legislation.

Generally speaking, railroads and other public utilities have not permitted professional auditors to pass upon their accounts. When rising costs of operation forced the companies to ask for higher rates, the requests were frequently refused on the ground that the utilities made outrageous profits in the past and that such profits should be used to tide them over the period of high operating costs. Few utilities have made unreasonable profits, but for some reason the public will not believe such a statement. If a proper system of publicity had been adopted and frequent audited statements had been issued, a different feeling would now exist.

7. Sale of a Business.—The author has had several experiences in which it was demonstrated that if periodical statements of the results of operations, duly certified to by responsible auditors, had been available, large enterprises would have changed hands in a few days; but, such statements not being promptly available, the sales were not made.

In the case of a corporation in which the president owned a controlling interest, he was offered two and a half million dollars for control, subject to examination by accountants. He accepted.

When an attempt was made to ascertain the earnings for a period of years it was found that no accurate records had ever been kept. Large profits had been realized, but this was known only because the money was in the bank. Physical inventories had never been taken and book inventories had not been kept. At the time of the proposed purchase the plant was operating on an extensive scale, but as no cost records were kept, it was impossible to determine the rate of profit on the current output. The deal was called off.

The president complained bitterly. He had paid enormous dividends, which he knew had been earned, but no one could determine just when and how, and the condition of the accounts cast suspicion on the whole enterprise.

Practically all business men look forward to retiring sooner or later. It is a kindness to them to indicate how much easier and more certain it will be for them to accomplish their purpose if they can produce correct certified accounts than if compelled to depend upon unaudited accounts, which may fail to meet the requirements of a prospective purchaser.

8. Recovery for Negligence.—The final advantage of an audit (and one upon which perhaps serious differences of opinion may exist as to the advisability of public discussion) is, that a client who suffers loss through the dishonesty of an employee may recover an equivalent amount from the auditor if it can be shown that the latter has performed his work in a grossly negligent manner, and provided, of course, that the defalcation occurred during the period covered by the audit and continued thereafter.

CHAPTER IV

HOW TO BEGIN AN AUDIT

The importance of knowing how to begin an audit cannot be overestimated. The terms of employment are more or less general in their nature and the scope of the work is left to the auditor. Many practitioners commence the work before they have a clearly defined line of procedure in their own minds. It is advisable for the business public as well as for practitioners to consider various possibilities in order to eliminate useless work.

A Preliminary Program

Based on personal experiences of over thirty years, the author suggests the following preliminary program:

1. As to the Client.—Uncertainty sometimes exists as to the actual client whom the auditor is serving, to whom he is responsible, and who will pay the bill. It may be a banker or a prospective borrower, a corporation or a dissatisfied stockholder, a trustee in bankruptcy or the petitioning creditors, or a creditors' committee, a municipality, a congressional or an aldermanic committee, a state or an investigating committee of the legislature. In all of these cases and many more, differences of opinion have arisen as to the *legal* status of the client; therefore this word of caution addressed particularly to the beginner is in order:

Fix the legal status of the client before work is commenced.

In a New York case, the president of a corporation who took no active part in the management of the business except occasionally to preside over directors' meetings, contemplated the purchase of the stock of his associate stockholders and employed a firm of accountants to audit the books. The books of the corporation were turned over to the accountants for that purpose by

the treasurer of the corporation, who made the statement to the accountant that it must be understood that such an examination was the president's personal affair, and not that of the company. Upon completion of the work, and demand for payment, which was refused by the corporation (the president having died) an action was brought for the amount then due. The court held that the corporation was not liable. The court in its decision said in part: "The right of third parties to rely on the apparent authority of corporate officers is subject to the condition, that such third parties have no knowledge of a limitation on such authority. In this case we think the notice given the accountant that the audit . . . was for (the president's) personal account . . . was notice to the plaintiff."[1]

2. Proper Starting Conditions.—Some auditing engagements have ended disastrously for the auditors because the work was undertaken blindly. It is not enough that someone should say, "Here are certain books and records; I want them audited and a report made to me of what they contain." The client may *think* he knows what he wants, he may be financially able to pay, and to a young practitioner the temptation to jump in and follow instructions is strong indeed. But the client may and does change his mind as the work progresses, and even if the instructions are in writing, he will find some excuse for his change of mind. He may still be able to pay, but he may not want to. There are several notable examples of work done along the lines indicated for which the bills have never been paid.

Always spend some time with the client, reviewing the work before it is commenced. Map out as definite a program as possible, and overstate, rather than understate, the probable time which will be required. The client may have a vague knowledge of details, but he should know pretty well what the work should cover, and if the auditor cannot come to a fairly definite

[1] *Ernst et al. v. Cary Safe Company*, 113 Misc. Rep. 620; 185 N. Y. Supp. 168.

agreement with him as to the scope and extent of the work, the responsibility of making good is placed definitely on the auditor.

A few hours' talk of this nature may, subsequently, eliminate many days of useless work—useless because there may have been a mistaken idea as to the results wanted; or the results striven for might be very valuable and interesting *if* the work could be completed as originally planned.

In most cases the auditor's wide experience enables him to know better than the client just what should be done, and what may be safely omitted, but this does not relieve an auditor from his obligation to assure himself whether in the particular case before him the client's intimate knowledge of the business does not justify him in indicating the general lines along which the audit should be made.

A full and frank talk with a client cannot do any possible harm and may insure co-operation and harmony, which might be lacking if the auditor shows too much of a disposition to run the whole job himself.

3. Co-operation of Client's Staff.—A successful auditor told the author recently that in every audit he endeavored to attract, instruct, and convert the office staff, and in so doing he not only made his own work pleasanter and more satisfactory in a professional way, but that he also made them co-workers with him; and in many ways they aid the growth of a proper opinion of the value of the work of the public accountant. Many instances are known where auditors have antagonized an office staff and sent them out to an extensive acquaintance charged with a desire to criticize most unfavorably not only the offending auditor (which would not be unfair), but also professional auditors as a class. On the other hand, some very large engagements have resulted directly from a word of commendation to others from a bookkeeper or clerk who has had a satisfactory experience with the auditor of his accounts.

All auditors of experience agree that the majority of men are

honest—not a mere majority only, but *most* men are honest. Furthermore, most men are sensitive about having their honesty questioned even indirectly. The successful auditor does not conduct himself in such a manner as to indicate to *anyone* that suspicion exists. He *must* radiate his belief in the good faith and honesty of purpose of those whose accounts he is examining; but he should be none the less thorough and he will just as surely land any guilty man.

The honest man is also sensitive to criticism of his work. Here the auditor's task is harder, because the duty to one's client must be placed above everything else; and while it is sometimes unpleasant to condemn carelessness and mistakes on the part of the office staff, yet if it is evident that the client's business is suffering therefrom, failure to report actual conditions is a breach of professional duty.

But the auditor who prepares his report and sends it in to the client without considering its effect on the office staff may be doing a positive injury to his client as well as to himself. The clerk whose work is criticized may be one of the most valuable on the staff. His merits may vastly outweigh his shortcomings; yet if he is sensitive he may resign forthwith, thus weakening the client's organization and subjecting the auditor to the wrath which he in a measure deserves.

Or again, the clerk or clerks whose work is criticized may not resign, but being in the confidence of the client and having his ear every day, may easily offset all of the good effect which the criticisms and suggestions might have, and, in addition, prejudice the client against the further employment of the auditor. Naturally, the auditor is not informed as to what is taking place, and if his services are not called for when another audit is due, he is ignorant of the true reason for the decision against him.

Hundreds of business men have retained a professional auditor once as an experiment, because they had been told it was the proper thing to do, and would have become regular clients had the auditor been able to secure the sympathy and co-operation of

the office staff. Who can blame a busy man, necessarily dependent upon an organization of trusted employees, for heeding their opinion of an auditor?

4. TACT REQUIRED.—The auditor need not stultify himself by failure to criticize. As a matter of fact, an honest staff resents gratuitous commendation if they know it is not deserved. All they want is a square deal. In practically all cases the methods in force were initiated by the client himself or by the predecessors of the present staff. They are simply following precedent or instructions and should not be personally blamed for unsatisfactory methods or results.

Let the auditor proclaim his gospel of helpfulness and ask for co-operation in the interest of the staff and in that of the client. Let him demonstrate quietly that he knows more than they do, but let it be done unobtrusively. Show them that failure to be up-to-date is detrimental to success, and that modern methods must justify themselves. Get them interested and ask their help in preparing an unbiased report on actual conditions, and obtain their approval of the suggested changes. If this spirit prevails throughout the audit the client will be benefited, the office staff will be enthusiastic over the innovation, and the auditor will receive a unanimous invitation to come again.

5. COMPENSATION MUST DEPEND ON SERVICE RENDERED.—The professional accountant offers his services to the business public as an adviser as well as an analyst or auditor; therefore it is obvious that the matter of compensation and status cannot be determined as it can in those occupations where output or results can be measured. You cannot gauge an output of brains as you can a stated amount of manual labor.

Great harm has been done to the profession by certain advertisers who, for the purpose of selling correspondence courses in accountancy, have exaggerated the compensation of professional accountants. There is no reason why the profession should

be better paid than any other which serves the public to an equal degree. The implication in these advertisements that there is some fixed scale of fees which an accountant can charge is more or less correct, and it is unfortunate that such is the case, for it tends to place the profession on a par with day laborers.

If all accountants are to charge alike for their services, where is the incentive to excel and what kind of profession would it be if there were no premium on ability and experience? The best lawyers and the best doctors sometimes charge lower fees for the same service than less experienced and less competent practitioners, but such reduction is none the less professional.

So with accountants, as time goes on there will be less and less uniformity in charges, and the more skilful, capable, experienced accountant will not consider it necessary to place a fixed per diem rate on his services. Nevertheless, under present conditions per diem rates yield the greatest compensation. Where flat fees are charged it almost always means that some concession has been or will be made in the per diem rate, so that the auditor who can always command liberal day rates will reap the greatest financial reward.

The one good argument for a stated fee (and it is a strong one) is that the client prefers it in perhaps nine cases out of ten. Professional men should place the adherence to the ethics of their profession and the satisfaction of their clients above pecuniary gain. Therefore, if the work is fully and properly performed and the client is satisfied, the method or rate of compensation should be secondary, and a round fee, under such circumstances, is quite as ethical as a per diem rate.

If the fee has not been arranged beforehand and litigation is necessary, the auditor will receive the usual professional fee, provided, of course, that witnesses can be obtained to testify that the work measures up to the usual standard of professional work and that the fee is a reasonable one.

Juries, however, are apt to be more unreasonable than clients

with respect to professional charges, and the rule of arranging fees beforehand should not be deviated from except in special cases.

Prior to 1914 an inquiry into the actual rates charged by accountants was conducted in New York City. There was, of course, a wide divergence between the fees named by well-established firms having a large clientele and the accountant just starting in practice. The result of the inquiry is mentioned here for what it is worth, and without any attempt to set it up as a standard for other parts of the country, nor even for accountants practicing in New York City.

The questions and answers, with slight modifications in the form, were as follows:

Q. What is the maximum rate received per day, and for what class of work?

A. $100 per diem was the maximum rate received, and that only for a special class of work, such as an investigation calling for particularly expert knowledge. In one case, however, $250 per day was charged for a few days' service.

Q. What is the minimum rate per day received?

A. $10 per day.

Q. What is a fair average rate for accountants of the highest class?

A. $50 per day.

Q. What is a fair average rate for accountants who might be considered as not of the highest class?

A. $25 per day.

Q. What, in your opinion, would be a standard rate for investigations requiring first-class ability, as a minimum?

A. $25 per day.

Q. What, in your opinion, should be the rate for ordinary audits and examinations not requiring the highest ability, as a minimum?

A. $15 per day.

Q. If you were establishing standard rates, taking all circumstances fairly into consideration, what rates would you advise?

A. For standard rates the minimum fee for the man in charge should be $25 per day; for ordinary assistants, $15; and for juniors used in clerical checking, $10 per day; but the restriction of this compensation is not advocated, especially for those in charge of work, to $25 per day.

Owing to world-wide conditions, the foregoing rates have been revised considerably and if brought up to date the answers would probably quote the following:

Seniors: maximum $50, minimum $30.
Juniors: maximum $30, minimum $20.
With the amount charged for the principal from $50 to $100 per day.

In the legal profession contingent fees are often agreed upon. In the accounting profession the trend is decidedly against contingent fees. One of the rules of professional conduct, approved by the Council of the American Institute of Accountants reads: "No member shall render professional service the anticipated fee for which shall be contingent upon his findings and results thereof."

It is proper that the auditor should avoid even the appearance of evil, but it is a debatable question as to whether this rule is not so strict that literal compliance therewith is impracticable. If this is the case, the rule should be reframed in order to express properly the thought that it is always wrong for an auditor to undertake work which he cannot conscientiously certify to, or to submit figures which may reflect his prejudices rather than his honest convictions. As a matter of fact, auditing work may be performed upon the basis of a contingent fee, the propriety or honesty of which can no more be questioned than if it were undertaken upon a basis of per diem rates.

In the opinion of the author, the auditor should subject each engagement to scrutiny to discover any possible reasons why he should not undertake it. Work which involves his integrity should *always* be declined. The author knows of one case when a contingent fee was in every way ethical. It is possible that others may arise. The Institute should make its rule more flexible.

6. As to Where the Work Is Done.—This question receives but little consideration in the usual audit *until it is too late*

to make a change. Most audits are made in the office where the general books of account are written up. Provided there are ample space, adequate light, satisfactory and sanitary working conditions such as pure air, etc., and reasonable freedom from interruption by unauthorized persons, this is the ideal place.

When the audit is being aranged for, all of these points can be discussed. Few clients will hesitate to modify or improve existing conditions in order that the audit work may be performed under favorable auspices. But if this matter is left in abeyance until the audit is actually commenced, changes are almost impossible to effect, or if not impossible, the auditor usually deems it inadvisable to open up the subject. Therefore, stipulate for the best possible working conditions *before work is commenced.*

Wherever possible, the auditor should make a tour of inspection before commencing his audit, accompanied, if it can be arranged, by an executive of the client's office. This inspection should enable him to become familiar with some of the conditions peculiar to the concern whose accounts he is about to examine. The knowledge thus gained will enable him to lay out his audit program to better advantage, and it will tend to simplify and expedite his work.

7. Working Papers.—It may sound paradoxical, but the time to arrange working papers is *before* the actual work of the audit begins.

The most important point to emphasize is that the more inexperienced an auditor is, the more working papers he produces, so that the student or practitioner who aspires to a high place in his profession will avoid all unnecessary compilations and comments. He should try to settle his doubts relative to questionable transactions immediately, for the majority of his questions will be answered satisfactorily; he should eliminate the copying of trial balances, statements, etc., unless he has a clear idea as to their ultimate use; and he should ruthlessly destroy his papers as soon as their value is questionable.

It is a pity that the limits of this book make it impracticable to include detailed illustrations of how things should be done and how they should *not* be done. Perhaps the assertion that the skill of an accountant can always be ascertained by an inspection of his working papers is too sweeping, but it holds good in so many cases that it may as well be called a general rule, and therefore prospective auditors should take notice that some day they may be so judged.

If the professional man were as careful with his tools as is the mechanic, he would do better work and he would save himself many hours of duplicated labor. An accountant must be the personification of order and system; his business is to criticize careless methods in others and to construct proper systems for those who have none. Therefore he must convey the impression that he appreciates order and good methods and be able to demonstrate this by an exhibition of the highest degree of perfection in his own working papers.

Stationery is cheap, far cheaper in proportion than the implements used by mechanics, yet many accountants use a scrap of paper or the back of an envelope to make a record in connection with an audit, when the items so noted are important enough to be set down in an orderly way on a whole sheet of specially ruled paper. It really seems absurd to devote much space to this matter, and it is only because there is such a widely prevalent looseness in this respect that emphasis is placed on the use of good stationery and on always having plenty of it available.

An accountant or a bookkeeper should have on hand at all times a complete assortment of specially ruled paper of all sizes. Let him consider this as part of his plant, if need be, because a small expenditure will secure a large supply of paper. The special rulings should cover every form for which there may be the slightest call.

As to money columns, paper should be ruled with from three to eighteen columns. The former will be the most used, but there is a constant call for the latter. Then, of course, ledger-ruled

paper will frequently be used, and it is very desirable to have ledger paper with two money columns on both sides. The paper should be put up in pads of fifty sheets each.

In commencing an audit, a full assortment of paper, together with various colored pencils or ink, etc., should be gathered together and carried preferably in a stout leather portfolio having a first-class lock on it and containing convenient pockets for papers, pencils, rubber stamps, etc. Is it not obvious that a client or a client's clerk has more respect for an auditor who is fully equipped than for a man who is compelled to borrow first a sheet of paper and next a pencil in order to record details of the petty cash as counted? First impressions are lasting.

The professional auditor cannot afford to start wrong, since he does not have any opportunity to conceal his incompetency. Stock up, therefore, and keep stocked up, for a few extra dollars invested in a big supply of stationery is the greatest possible help to the young practitioner. Having the paper, use it. That is, do not even try to economize, for it is not safe to temporize and think that a particular memorandum is unimportant and therefore just as well recorded on a scrap as on a whole sheet which may have cost a quarter of a cent.

There should be an absolute rule strictly adhered to, forbidding the writing of more than one class of errors on the same sheet of paper. The reason for this is evident. The work covered is assumed to be a test only, and no one can tell how many errors may develop if additional verification is required. It is almost criminal for an accountant to write and rewrite and classify and reclassify his memoranda during the course of an audit, when every bit of the rewriting and reclassification could have been avoided by using one sheet of paper for each class of errors or queries.

An auditor who is careless about his working papers will vainly attempt to make sense out of his notes. How is it possible for such a man to write a report of the greatest possible value to his client? Even if he finally deciphers all of his notes, he makes so much trouble for himself that in consequence thereof he writes his

report in a troubled and irritated frame of mind. His careless style, of course, permeates the text.

Consider the case of an auditor who takes the trouble to provide himself with an ample supply of paper, and who uses a separate sheet for each class of error, suggestion, or comment. When he is ready to write the report he merely sorts his working papers, and with full notes before him, with no irrelevant matters constantly interrupting his train of thought, simply proceeds in an orderly manner to the close. Is it worth while? Who has the better chance for another engagement from the client so served?

Auditors often need exact copies of papers, signatures, etc., for future reference or for court proceedings. Usually it is not possible to retain the client's copies. In such cases the auditor will find it to his advantage to have photostats made. They can be secured in a few hours and are not expensive.

8. Permanent Filing of Working Papers.—After a report has been written great care must be taken to file the working papers intelligently and according to a well-laid-out and thoroughly understood plan; otherwise serious inconvenience may be sustained on subsequent occasions when a particular schedule or reconciliation sheet is required in a hurry. A plan which has been followed with success is the following:

Commencing with the balance sheet submitted to the client, each item thereon is assigned a letter. For instance, if "Plant" is the first item among the assets, the letter A is assigned thereto. Each schedule relating to plant is marked A_1, A_2, A_3, etc., and all papers containing information bearing thereon are grouped accordingly.

The same plan applies to the income amount and to any other schedules having numerous supporting papers.

When the single letters are exhausted, double letters may be used, as, AA, BB, etc. Variations of this plan will suggest themselves to the auditor who has had difficulty in locating working papers.

A draft of such a scheme of indexing working papers is given below:

Pages		
A		Draft of Report
B		Balance Sheet
C		Earnings and Expense Statement
D		Other Report Schedules
E		Trial Balance
F		Adjusting Entries
G		Assets:
	GA	Cash and Bank Certificates
	GB	U. S. Obligations
	GC	Notes Receivable
	GD	Accounts Receivable and Reserve
	GE	Inventories
	GF	Investments
	GG	Deferred Expense
	GH	Plant and Equipment and Reserve
	GJ	Patents and Good-Will
	GK	Other Assets
	GL	
	GM	
H		Liabilities and Capital:
	HA	Notes Payable
	HB	Accounts Payable
	HC	Accruals
	HD	Reserve for Taxes, etc.
	HE	Mortgages
	HF	Other Liabilities
	HG	Capital Stock
	HH	Surplus
	HJ	
	HK	
J		Income Accounts
K		Miscellaneous Data
L		Comments—Minutes, etc.
M		Tax Matters
N		Correspondence
O		
P		

9. Familiarity with System in Use.—During the auditor's early training he has an opportunity to acquire special knowledge regarding many lines of commercial activity, so that many of his future engagements will cover undertakings the special features of which will be familiar to him. It is impossible, however, for any auditor to have experience in every line of business, and engagements are sometimes made to audit accounts of which he has no technical or special knowledge. He is not expected to have such special knowledge, but he should explain that the fundamentals of all businesses are similar and that he is thoroughly versed therein.

An admission of his unfamiliarity wins greater respect than does an attempt to conceal his ignorance; progress cannot be made without asking many questions, and it does not take a client long to discover ignorance if an attempt is made to conceal it. In any event, and notwithstanding long experience with the same class of business, the auditor should ask questions about the personnel and the special features of the business under review.

Local conditions and peculiarities sometimes produce strange results, and the auditor finds it easy to acquire a broad knowledge of many things during his preliminary conferences which would take far more time to acquire later. The client and his staff expect to be asked a lot of questions (intelligent and tactful ones, of course) at first, and the wise auditor makes copious notes of the information so derived. The client is likely to volunteer the history of his life and the progress of his business in great detail. Advantage should be taken of such an opportunity to grasp the technical points of the business. Later it may be difficult to catch the client in the same frame of mind.

The auditor may be asked whether he can make a satisfactory audit of single-entry books. Of course there is no difference at all so far as auditing principles are concerned.

In single-entry, as in double-entry systems, the auditor should see that all assets which should be on hand are properly accounted for; that all income which should have been recorded is

found to be in order; and should apply all of the general principles of auditing. Single-entry books do not readily lend themselves to tests and automatic checks as do double-entry records, more details must be verified, and there are difficulties in the way of preparing satisfactory balance sheets and income statements. But these are not matters which require special treatment in this book.

10. Schedules of Books, Records, and Names of Clerks.—A mastery of the general system in use includes a comprehensive knowledge of the books and records which contain the transactions of the business under audit. Books of account are the histories of business enterprises. Since a history is not complete unless it records an unbroken narrative of facts, the auditor must determine whether or not there is such a continuous record of the transactions of the business in the books submitted to him.

The time to determine this is *before the audit begins*, and at the time of the inquiry a full description of the records should be made and the names of the clerks responsible therefor should be carefully noted. These names will be needed subsequently and when reporting. It arouses suspicion to ask for names when needed.

In England it is customary in most cases, and compulsory in others, for the auditor to be supplied with a list of the books in use. In this country the advantage of this precaution is strangely neglected.

No book should be listed until its use, or abuse, is fully comprehended. This is a favorable opportunity to fill out any gaps in the complete survey of the business which the auditor must possess. The answers to the preliminary questions and a detailed schedule of all the books in use should form the basis for an intelligent study of *how to begin*.

11. Procedure where Previous Audits Have Been Made.—A prominent accountant estimates that not more than 10 per cent of the business concerns of this country have their accounts

audited. As most of the work that is done is satisfactory, it is only in rare cases that an auditor is displaced.

It is not considered ethical for one auditor to supplant another where the only reason for the change is that of remuneration. If a client expresses dissatisfaction with the work of one auditor and announces his intention of retaining another, there can be no objection to the appointment.

Wherever feasible, the auditor should receive a copy of his predecessor's report, but if it cannot be had, his inspection of the books, and the unsolicited remarks of the client's staff, will probably indicate the extent of the previous audit.

Of course, no auditor can be held responsible for the acts or omissions of another auditor, but he has no justification for blindly following the procedure of a previous audit, even though the client requests it. Therefore the auditor should regard all that he learns of his predecessor's work as information purely supplemental to that already pointed out as important, and, weighing all together, he will proceed as his own best judgment dictates.

Sometimes, from a feeling of delicacy, the auditor will not insist on a full explanation as to why the previous auditor's services have been dispensed with. In view, however, of the fact that auditors have been displaced for failure to discover specific weak spots, it is obvious that the succeeding auditor is at a disadvantage without this knowledge, so that in all cases insistence on an explanation can do no harm and may do much good.

Shortly stated, a safe general rule is to proceed as if no previous audit had been made, unless complete reports of another auditor, in whom the fullest confidence is placed, are in evidence, and unless there is no question as to the reason for the former auditor's displacement.

12. Transactions or Developments Occurring Subsequent to the Date of the Balance Sheet.—To what extent should an auditor be governed by transactions or developments

occurring subsequent to the date of the balance sheet but prior to the date of the certification? In stating the financial position of his client as of a given date, should he look at the past and shut entirely from view the prospects for the future? As to a contingent liability, if any development occurring after the date of the balance sheet but prior to the date of the certification, materially modifies or possibly removes the contingency, that development should be considered in the preparation of the balance sheet. If there is an appreciable change in market prices subsequent to the date of the balance sheet but prior to its preparation, the most recent fluctuations should be considered in estimating any contingent loss. In brief, an audit should not be restricted altogether to transactions which have been concluded or have reached a precisely determinable status at the date of the balance sheet. The subject will be more fully discussed hereafter.

13. Final Considerations: Detailed or Balance Sheet Audit?—It may be inferred that, having studied the matter from so many standpoints, and particularly after having had a final interview with the client, there remains nothing to do but to commence the actual work.

This, however, is not the case. Now is the most important time for calm reflection. Up to this point many features were more or less uncertain. The client's understanding of the state of his books and the detail therein and the explanations of the clerks, together with a survey of the books themselves, all affect the final decision as to what should be done.

Frequently a client makes the broad assertion that he wants complete and detailed examination of his books. Subsequent inquiry may develop the fact that a first-class system of internal check exists, or that the transactions are so numerous that a detailed examination is quite unnecessary. Therefore the auditor should reserve final decision as to the scope of his work until he has inspected the books and interviewed those in charge thereof.

The final point to be decided is: Shall a detailed or a balance

sheet audit be made? These two classes of audits are discussed fully in subsequent chapters, but it is desirable that a brief survey of each be made at this point in order that we may now completely cover every phase of preparation up to the actual physical work of the audit itself.

In dividing audits into two classes, the author has not failed to consider another class, viz., "cash" audits. The title is a misnomer, however, because many attempts to limit an auditor to an examination of cash records have either resulted in an incomplete and unsatisfactory task, or else the work has naturally extended into other records complementary to the cash account, which, of course, are vitally necessary to a proper audit.

A professional auditor probably should not refuse point blank to make a so-called cash audit when requested to do so, but he should explain fully and carefully that most fraud and carelessness lie in the transactions which do not reach the books; that the cash account in itself is only a portion of a system, every part of which depends upon and works into the others. He should explain that to accept a cash book as correct is unwise, because it is not what is in the book and accounted for that is of interest, but rather what is *not* there, evidence of or clues to which may possibly be found in the other books and records.

Perhaps the safest answer for the auditor to give is the statement that there is no such thing as a cash audit, and follow that statement by an explanation of the points usually covered in a detailed audit and in a balance sheet audit.

The Detailed Audit

Whenever a complete examination is desired or desirable, a detailed audit should be made. In those undertakings having no satisfactory internal check the detailed audit is the only one which covers the income and expenditures for the period under audit. This applies, therefore, chiefly to small enterprises; but since the organizations which have a complete system of internal check are in the minority, the auditor will in many cases have to undertake

a detailed audit. But a detailed audit in the sense in which the term is used here does not contemplate the verification of every item in the books.

Not many years ago one of the principal features of every audit was the inspection and verification of vouchers for cash payments. In many instances certificates stated without reserve that the "accounts have been audited and found to be correct," when, as a matter of fact, absolutely nothing was done but to compare certain receipts purporting to represent payments of cash and acknowledgments thereof, with the payment side of the cash book. The certificates appearing at the end of treasurers' statements in many published reports of charitable and religious institutions show just such a state of affairs.

It seemed conclusive to many people that if a cashier or a treasurer can furnish a voucher for every item of cash disbursement, there simply cannot be anything wrong with the accounts as a whole. As the science of accounts developed, some auditors were not satisfied with this, and they supplemented the examination of the vouchers by a complete verification of the footings and postings. Having done this, they were content, and felt that great strides had been made in the art. Add to the above the checking of the trial balance and you have the full program of a large percentage of audits—certainly up to fifteen or twenty years ago.

Careful consideration of a large number of defalcations reveals the fact that most of them could *not* have been discovered by a verification of the vouchers, footings, postings, or trial balances. This fact does not eliminate the necessity for proper attention to such work, but it does emphasize the greater necessity for attention to the work which experience shows is productive of the most satisfactory results.

An auditor must at all times study and think and appreciate the need of preparing all of his plans on a *relative* scale. Conceding the obvious conclusion that no audit can or should embrace a complete verification of all the transactions of the period under

review, it follows that the process of elimination must proceed scientifically, with the definite goal in view of having the points covered coincide with the weak spots.

In succeeding chapters the author outlines the procedure for a detailed audit in which proper weight is given to the verification of the routine bookkeeping, but in which more stress is laid on other phases of the accounts which have proved to be those most susceptible to fraud, carelessness, and ignorance.

Where there is a satisfactory system of internal check, the auditor is not expected, and should not attempt, to make a detailed audit. The word "satisfactory," however, is used advisedly, for more than one large corporation with a comptroller and a force of staff auditors lacks a complete system of internal check.

When the staff auditor is also an officer in the business, he is seriously handicapped when he endeavors to check the records of other departments of the organization. There are so many opportunities to impose administrative functions upon him that shortly his supervisory and auditing duties become hopelessly entangled. Frequent proof of the existence of this condition of affairs is seen in the discovery of defalcations on the part of officers who were not supposed to have access to funds or securities.

If the staff auditor is a clerk, his position is still more difficult to maintain. If his superiors are dishonest, he soon has to choose between dismissal and silence. Therefore the mere statement that an auditing department exists is not enough evidence in itself to obviate the necessity for a detailed audit.

Balance Sheet Audit

If the auditor has satisfied himself that the system of internal check *is* adequate, he should not attempt to duplicate work which has been properly performed by someone else. His duty then is to verify the assets and liabilities, and to make such an analysis of the income account as will enable him to certify that it has been properly stated.

But there is a much wider field for balance sheet auditing than this. Bankers are awakening to the value of certified statements from borrowers or prospective borrowers, and there are vast possibilities in this class of work. The auditor who can undertake these engagements with a clear outline of what is to be covered, and, more important still, what should be omitted, has a tremendous advantage over the auditor who does not appreciate the peculiar circumstances which surround this class of work. Balance sheet audits are also required in many other cases. The author, in a later chapter, attempts to set forth as concisely as possible what, in his opinion, *should* be done in a balance sheet audit, and what *need not* be done, and what *should not* be done.

Suggestions to Client's Staff before Commencing Work

Where an audit is made for the first time, the client usually informs his entire staff of his intentions, so that there is no possible chance of gaining any advantage by surprising them.

Then, too, it may be that the audit is being made at the request or on the suggestion of one or more of the staff. This occurs frequently where ambitious bookkeepers and cashiers realize that the methods in use in the office are obsolete.

If the auditor desires full co-operation, he should seek an opportunity to ascertain the condition of the books and records as soon as possible after the engagement has been made. He gains nothing whatever by jumping in before the books are written up or balanced.

CHAPTER V

AUDIT PROCEDURE

The author at one time believed that audit notebooks, "standard" audit programs, and "model" forms for reports were of great value; but after using them for some years it became evident to him that vigilance, imagination, and the independent thought and judgment due from a professional practitioner, are all more or less stifled by the use of set forms and set directions. This criticism is not directed at the program which an auditor should make up for and make adaptable to each audit. This book is intended to be an audit program in itself. Unless each program is written up specially, the temptation to repeat what has been done before is greater than the average auditor can withstand. The situation is not unlike bookkeeping instruction. At one time there were tens of thousands of school boys and girls who had studiously filled in journals and ledgers, and prepared trial balances and other statements according to the formulæ in the textbooks, without being able, a few months later, even to talk intelligently about the theory of bookkeeping. The author investigated this situation and decided that the chief defect was in the explicit directions which were given. It was possible to memorize most of the rules, and the students were more interested in their examination marks than in the fundamentals.

Program of Audit

In this book the author discusses every phase of auditing but avoids the presentation of a detailed or condensed model audit program. The material is all here but those who desire a program must prepare one for themselves. Nothing can be more harmful

to students than the exclusive use of condensed rules of procedure; practitioners who rely on programs prepared by others are chargeable with negligence if they permit fixed rules to take the place of independent procedure. There is, however, no objection to the use of a summary of the procedure to be followed in most audits, provided the summary is based upon and used with discussions of the underlying principles of auditing. In response to a request from the Federal Trade Commission and later from the Federal Reserve Board, a committee of the American Institute of Accountants in 1917 prepared a memorandum of audit procedure which was adopted after some modification and published by the Federal Reserve Board.[1] This provides a flexible balance sheet audit program. It also should meet the demands of those who desire an inflexible program, because the entire scope of an audit is covered in 27 pages. The memorandum is reproduced in full in Appendix A.

Papers, etc., Required by Auditor

As he will probably be asked what he desires in the way of vouchers, etc., the following memorandum has been prepared. It is, of course, only suggestive, as the auditor must be governed by local conditions:

1. A correct trial balance, as of the date the audit is to be made, should be prepared. If not ready by the time the audit is to be commenced, the auditor should have a conference with the client and the bookkeeper and determine: (a) if the work is to proceed at once; (b) if it is to be postponed until the differences are located; (c) if the auditor, acting as an accountant, is to locate the errors.

2. Controlling accounts in the general ledger should be in agreement with the subsidiary records; if not in agreement, the matter should be discussed with the client and an understanding

[1] The author was chairman of the committee, which was composed of representative members of the Institute. In addition, accountants with, and members of, the Federal Trade Commission and the Federal Reserve Board participated in the discussions and made many helpful suggestions.

reached as to whether the errors are to be located or allowed to stand.

3. Schedules of notes receivable (whether or not discounted), notes payable, bonds, stocks, etc., should be prepared.

4. Monthly statements from creditors should be preserved.

5. Paid bank cheques and all other vouchers should be taken from the files and arranged *as requested* by the auditor. The auditor should not disclose the use he proposes to make of the vouchers.

6. If an inventory has been taken, the auditor should state to what extent he desires the certification of those responsible therefor, and he should insist on the original sheets being preserved and submitted.

7. If there are many accounts receivable, it may be wise to request that they be divided into groups, showing all those overdue, etc., so that an estimate of the reserve for bad debts may readily be made.

SYSTEM OF INTERNAL CHECK

Purpose of Internal Check

Reference has several times been made to the fact that the question, whether a detailed audit should be made, or whether a balance sheet audit will accomplish the desired end, depends to a considerable extent upon the existence of a satisfactory system of internal check.

Such a system consists in the accounting records, methods, and details generally of an establishment being so laid out that no part of the account or procedure is under the absolute and independent control of any one person; that, on the contrary, the work of one employee is complementary to that of another; and that a continuous audit is made of the details of the business.

Although the details of a system of internal check vary somewhat in different cases, the following general points usually require careful attention.

INCOMING MAIL.—Proper provision should be made for safeguarding incoming mail, so that cash received will reach the cashier. The opening and handling of incoming mail should be in charge of some responsible person, preferably an officer of the company.

All remittances should be listed and the list subsequently compared with the cash records. Where the cash items are not listed at the opening of the mail, there is practically no internal check on cash receipts, since it is impossible for the person opening the mail to remember the nature or amount of all or even a large part of the items received. Furthermore, even if it were possible, it would not be an efficient check. If any independent control at all is to be exercised, the cash items must be listed at once and the list must subsequently be compared with the cash records.

CASH.—All money received, whether in the form of cheques or cash, should be deposited in the bank daily.

All cash payments should be made by cheque signed by one of the principals and supported by a duly authorized voucher. Small payments that must be made in currency should be made from a petty cash fund set aside for that purpose.

Receipts or vouchers should be secured for all disbursements from this petty cash fund, and at frequent intervals the cashier should prepare a statement of disbursements made therefrom. Upon surrender of this statement accompanied by the vouchers or receipts, certified to by the cashier as to correctness of the items, he should be reimbursed by cheque for the total amount shown by the statement. This should also be done at the close of each fiscal period.

The cashier should not have access to any of the individual ledgers, nor to statements sent to customers.

The bank balance should be reconciled monthly by the bookkeeper or someone other than the cashier, if possible. The outstanding cheques should be listed, and the balance shown to be in bank should be reconciled with the balance called for by the

cash book. The payments covered by cheques of large amount which are listed as outstanding for more than thirty days should be investigated.

INVOICES FOR PURCHASES.—The issuing of orders for the purchase of goods or materials is one of the most important duties to be performed in any organization. While in smaller concerns this work is frequently performed by a principal, in larger enterprises it is usually necessary to delegate the work to an employee.

One person should be responsible for all purchases. Requisitions for requirements of the various departments should be sent to him and formal orders should be issued from his department, or else all orders issued should be subject to his approval.

Every purchase requisition should bear a number, be properly dated, and should have a notation indicating the department in which it originated. As a general rule orders should state prices and exact quantities required.

Purchase orders should contain instructions and conditions which will facilitate the delivery of the goods and the preparation of correct invoices as well as protect the client in case of controversies relative to prices, deliveries, etc. The purchase department should have sufficient data relative to quotations, prices, etc., to enable the client to determine whether purchases are being made at the best possible prices.

The question of transportation charges or allowances should be investigated and a special notation made in those cases where the freight charge or allowance is to be charged to the shipper.

Duplicate copies of all orders should be retained, and one of these copies should have a suitable blank space for entering the date and amount of invoices received applying against that order, thus making it more difficult to pass a duplicate invoice.

A careful record should be made of all goods received. In some of the larger concerns copies of orders from which the quantities and prices have been eliminated are sent to the receiving clerk for his information. Then upon receipt of the goods or

materials the receiving clerk enters the quantities and sends the copy of the order to the accounting department to be compared with the invoices. For purposes of internal check or even for auditing purposes the receiving record is of little value unless it contains in detail the quantity and the description of every item.

In some concerns, notably department stores, purchase invoices are registered before being sent to the receiving room or to the various buyers. After an invoice has been passed by a buyer it is returned to the registry office, checked off in the register, and sent to the accounts payable division for entry in the purchase record. The invoice register is used as a means of keeping track of invoices, and it also has a further use in connection with the determination of the liability for merchandise in transit or merchandise held in the receiving room, as the open items on the register should represent the total of merchandise still held in the receiving room, not officially received, plus merchandise en route.

If the receiving clerk is not competent to pass upon the quality, he should ask for the assistance of someone who is competent from one of the other departments. The operation of comparing the invoice with the order, the checking of quantities, quality, prices, and extensions should be indicated by the initials of those responsible for each operation, respectively.

Before being sent to the treasurer for payment, invoices should be approved by the executive in charge of the accounting department; and when the cheque is drawn this fact should be noted on the invoice in some manner, to avoid a second payment. If the voucher system of payment is not used, the stub of the cheque should show sufficient information to enable the bookkeeper to identify the items paid. The accounts payable accounts or creditors ledger accounts should be balanced at regular intervals. The shipping clerk should keep a separate record of purchases returned, and this record should be systematically followed up to secure credit from the original shippers.

SALES INVOICES.—A systematic record should be made of all orders received. When shipments are made shipping orders should be compared with, and notations made on, the sales orders to that effect. Invoices should then be prepared from these sales orders.

The quantities, prices, extensions, and additions of all sales invoices should be checked at least once before the invoices are sent out. This checking should include a comparison with the customer's order or an abstract thereof.

Whenever possible, the duplicate copy method of writing the sales book should be used, the first carbon copy of the invoice becoming the sales record. This supplies in the sales book an exact copy of the invoice sent out and is admissible as evidence in court.

The receiving clerk should keep a separate record of sales returned, which record, subject to the approval of somebody in authority, should be the basis for rendering credits for such goods to customers.

CUSTOMERS' ACCOUNTS.—As stated previously, the employee in charge of cash receipts should not have access to customers ledgers.

Allowances should not be made, except upon written approval from proper authority; and journal entries to close out accounts, such as bad accounts, should be supported by official authorization.

If customers' accounts are kept in subsidiary ledgers, the subsidiary records should be balanced with the controlling account at regular intervals.

COLLECTIONS.—Some systematic method should be followed in the collection of accounts. In larger concerns this should be in the hands of a separate department. In any case it should not be left entirely in the hands of the bookkeeper.

PAY-ROLLS.—The method of preparing the pay-rolls should be such that every step receives an independent check by some-

body other than those in direct charge of the work. A record should be kept of the name and rate of each employee, and no entries should be made on this record, either in the way of additions or changes, without proper authority in writing. In larger establishments a separate employment department should be maintained. The pay-roll record should be compared with the employment department records as to name, date, when employee entered and left the service and rates of pay. Payments of money to employees should be made in the presence of two or more persons, and both the paymaster and the witness should sign the pay-roll sheets to evidence the payment. A list should be made of all pay envelopes left over, which record should be handed to the accounting department as soon as it is completed. The accounting department should inspect all receipts for amounts subsequently paid, and verify the entry made for the balance of the envelopes not called for.

STOCK RECORDS.—Where practicable, a perpetual inventory of stock on hand should be maintained. The quantities shown by this inventory should be verified from time to time by comparison with the actual goods or materials. An entry should be made of all material purchased or manufactured as received in the storeroom, as evidenced by a receiving report. No material should be issued without a requisition, which in due course is entered in the stock records.

VACATIONS.—Every member of the office staff should be required to take a vacation at least once a year. It is advisable to transfer employees from one position to another at more or less frequent intervals, depending upon the class of work which they perform.

Branch Office Accounts

Where branch offices are purely sales offices, it is customary to pay the petty expenses of the office from a petty cash fund advanced to the branch. Reports of petty disbursements accom-

panied by vouchers are sent to the home office periodically, and a cheque is then drawn to reimburse the branch petty cash fund. The auditor should examine these reports and the vouchers accompanying them. The reports should show the approval of the person in charge of the branch office, and in some cases it is desirable that each voucher should show the proper approval. Cases are known where the amounts of express bills have been raised by office boys before the bills were presented to the local cashier for payment. The auditor should, of course, examine very closely any bills which show indications of erasures, and make a further investigation if the facts warrant.

If invoices are rendered and customers' accounts kept at the branch office, it may be that a complete system of internal check will make it unnecessary for the auditor to visit the branch office, although such cases are rare.

Some companies, due largely to the nature of their business, have an almost infallible check on their branches. A perpetual inventory of all goods shipped to or purchased by the branch is kept at the home office. Copies of all bills rendered by the branch are sent to the home office, where either a controlling account of the branch customers ledger or a duplicate set of customers' accounts is kept. A trial balance of the branch ledgers is sent to the home office at the end of each month; copies of all credits rendered and journal entries made are also sent to the home office, where they are carefully inspected before being approved. Cash collections are deposited in a local bank account, over which the branch has no control, cheques on this account being drawn at the home office. By the use of carbon paper, copies are made of the branch office cash book and one of these copies is sent to the home office each day, accompanied by signed duplicate deposit slips. Statements and paid cheques are sent direct to the home office by the local bank. Disbursements for petty expenses at the branch are made from a petty cash fund such as has been previously described. The auditor's duty in cases of this kind should be to see that the system as planned is carefully carried out at the home

office, and he should make such tests as may be necessary to satisfy himself that this is being done.

ASSETS AT BRANCHES, ETC., PAID FOR IN FOREIGN CURRENCY.—*Fixed Assets.* At the time when acquired, all fixed assets paid for in foreign currency should be set up on the home office books in United States currency, whether paid for out of specific remittances or out of the general funds of the foreign branch. The reason for this is that the book cost is not affected by subsequent fluctuations in exchange; obviously, if the book cost is not set up in dollars at the time of acquisition, subsequent valuations will reflect temporary fluctuations and unnecessarily and improperly obscure actual costs. Depreciation, depletion, and amortization should all be computed on the basis of original cost in dollars irrespective of subsequent fluctuations in the value of the foreign currency.

Current Assets. The net current assets at the date of closing the books should be converted into dollars at the prevailing rate of exchange on that date.[2] It therefore is unnecessary to attempt to identify the disposition of the remittances during the period so far as current assets are concerned. When the charges against the branches are for materials and supplies, authorities differ as to the proper treatment. The following bears on this point.

---

[2] "At the close of the fiscal period, when the books are closed, no change is made in the debit balances of the fixed-asset accounts because of the established principle that fixed assets should be valued at cost, regardless of market fluctuations. In regard to the floating assets and liabilities, the custom is to convert the values at the rate of exchange current on the day of closing. There is considerable variation in the procedure for the valuation of nominal account balances—sometimes they are converted at an average rate for the period, and sometimes at the current rate at the end of the period. While the average-rate method is usually advocated on the ground that the earnings and expenses accrued during the period, this method is subject to the objection that a simple average of the rates of all days during the period fails to take into consideration the fact that transactions varied in volume from day to day. As the operations resulted in an increase or decrease of the net current assets at the branch and since these current assets and current liabilities are converted at the rate current at the end of the period, it would seem consistent to convert the current-account balances at the same rate." (H. A. Finney, *Journal of Accountancy*, June, 1921, Vol. xxxi, page 458.)

If the home office buys for gold and ships to the plant any raw materials or supplies that are not immediately used, it should charge and the plant should credit the silver value at the rate of exchange at the time of shipment. As the articles are used, it would seem the proper procedure to charge them to operating costs at the same rate. However, Sir A. Lowes Dickinson says, "The most satisfactory method of dealing with this condition is to keep the accounts of materials, stores and supplies originating in the United States in United States currency until they are used, and then to charge them out to the accounts concerned—whether construction or operating—at the rate of exchange current on the date of issue for consumption; in other words, these materials, etc., while in fact in China, are deemed to be in the United States until issued for consumption, and are only then passed through the current accounts between the two offices."

This is open to the objection that the accounts at the plant will not reflect the true conditions, as the plant may be in possession of a large amount of materials, etc., which will not appear on its books until used, and to the further objection that, if the materials are issued very frequently, the rate at which they must be charged to operations by the branch manager will be subject to constant variation with regard to actual cost, and that no silver value can be expressed on the home-office books until the report of the dates and quantities of the different issues is received in the United States.[3]

Without attempting to discuss fully this point, the author is of the opinion that all materials, supplies, etc., actually on hand at foreign branches should be converted into foreign values when received at such points. When inventoried the same basis should be used, whether the goods were purchased locally or shipped by the home office. To sum up: The values of goods and other current assets are immediately converted into foreign currency at the branches in order to be on the same basis as local purchases; at inventory time foreign currency is used at the branches; at the home office the conversion of all current asset accounts and advances into domestic currency will result in the inventories being valued on the same basis at the end of the period, and at the same time will absorb all profits or losses on exchange during the year.

[3] H. A. Finney, *Journal of Accountancy*, June, 1921, Vol. xxxi, page 458.

CHAPTER VI

BALANCE SHEET AUDIT—ASSETS

In this chapter will be discussed the general principles which underlie the audit of all assets which appear or which should appear on the balance sheet.

The requirements of credit grantors compel correct grouping or classification; terms are explained, defined, and discussed. The audit of current assets will next be outlined, following the order in which the assets appear in the best form of balance sheet.

General Principles

The underlying principles of a balance sheet audit may be reduced to writing. They are not subject to change to fit particular businesses or special systems of account. They are few in number and can be applied generally. They are as follows:

The auditor must ascertain—

1. That all of the assets shown by the books as having been on hand at a certain date were actually on hand.
2. Whether any other assets, not on the books, *should* have been on hand.
3. That the liabilities shown by the books as owing at a certain date were *actual* liabilities.
4. Whether or not *all* liabilities were in fact shown by the books.
5. Whether or not the liabilities so shown were *properly* incurred.
6. That the surplus and the income accounts are properly stated.

In the following pages these theories are discussed and the work incident to a balance sheet audit is explained.

In Appendix A will be found the complete text of a tentative proposal for uniform accounting submitted in 1917 by the Federal Reserve Board "for the consideration of banks, bankers and banking associations; merchants, manufacturers and associations of manufacturers; auditors, accountants and associations of accountants." It gives an outline of the work to be done and the statements to be submitted in connection with a balance sheet audit. It was prepared primarily to assist bankers. It is assumed that accountants will submit balance sheets as nearly uniform in their arrangement as possible. In addition, it is the aim of the Federal Reserve Board that balance sheet audits shall be performed in such a manner that the banker can rely reasonably on the accuracy of the various items appearing in the balance sheet.

The proposal states that the scope of a balance sheet audit of an industrial or mercantile corporation or firm comprises a verification of the assets and liabilities, a general examination of the income account, and, incidental thereto, an examination of the essential features of the accounts.

Limitations of Balance Sheet Audits Must Be Understood

In arranging for a balance sheet audit, the distinction between an audit of that character and a detailed audit should be pointed out to the client.

Sometimes after a balance sheet audit, which was specified in writing, is made and the report rendered, it is discovered that petty defalcations have been going on for a long time. It is natural for the client, in such case, to criticize the auditor; but if the latter has a written order to which he can refer, he can clearly show that the detection of the small theft was not within the scope of the audit. If, however, the auditor is careless about the preliminary arrangements and neither explains orally, nor puts in writing, the limitations of a balance sheet audit, he will find himself in an embarrassing position and will be fortunate if the worst that happens is the loss of the client.

Although an auditor cannot be held liable in money damages unless negligence is proved, yet a jury may find that a client who instructed a professional auditor to "make an audit," without any limitations being mentioned, can reasonably expect the details of his accounts to be fully covered. For instance, an auditor when making a balance sheet audit rarely proves the footings of the petty cash book; but if it is afterwards found that these footings have been systematically overstated and the client defrauded, an auditor's freedom from or liability for, negligence may rest entirely on the conditions of his employment.

Analysis of Assets

One important point to be kept in mind in a balance sheet audit is that an entry on the books which purports to record an asset is *nothing more* than a *book* record, and that there can be no good excuse for accepting such entry as final. The data supporting the entry may be in order, but it is the auditor's duty to verify independently, as far as possible, the fact that the asset still exists, or did exist at the date of the balance sheet.

Assets are divided into current, fixed, and miscellaneous. It is possible to classify most asset items as current or fixed, but there are accounts, such as discount on bonds and certain claims, which are usually stated separately.

Tangible and Intangible Assets.—In addition to the segregation of assets into current and fixed, another classification is often used, viz., tangible and intangible. These terms are defined on page 174.

Working Assets.—The term "working assets" is sometimes used synonymously with "current assets," and in other cases an attempt is made to differentiate between "working" and "current." In the author's opinion the word "working" might be used to describe plant as well as current assets. In any event it is not a good term and its use should be abandoned.

Basis of Valuation of Assets

As a rule fixed assets are "valued" at cost less depreciation. In some cases appraisal values are substituted for cost. From the standpoint of actual value, for some special purposes an appraisal is desirable; from the standpoint of a going business it is better to ignore fluctuations in values.

Current assets usually are not all valued on the same basis. Cash, accounts and notes receivable, and prepaid items are stated at realizable values. Inventories are usually valued at so-called market prices if the market is lower than cost, and thus all of the current assets are valued on the same basis; if so-called costs are lower than so-called market prices, the market basis is ignored and thus the current assets are valued on different bases.

The valuations of fixed and current assets are discussed in detail in this and succeeding chapters. At this point it is only necessary to mention that accounting practice does not always call for balance sheet valuations either on a basis of what the assets are worth as a going business or what they are worth in liquidation. It is an interesting study to attempt to establish uniform rules which will govern balance sheet construction and enable the users of balance sheets to determine the true net worth of the concern under audit.

Definition of Market Value.—Even though market values frequently have been ignored in balance sheets, the time is coming when more attention will be paid to true values.[1] "Mar-

[1] "Value. (A) This term has two different meanings. It sometimes expresses the utility of an object, and sometimes the power of purchasing other goods with it. The first may be called the value in use, the latter the value in exchange.

"(B) In the first sense, the term has been defined as the price deemed or accepted as equivalent to the utility of anything; the utility of an object; worth.

"(C) In the second sense, the term has been defined as the sum for which the like goods are commonly bought and sold in the market; the sum of money a thing produces to the seller when it is sold; the amount of other commodities (commonly represented by money) for which a thing can be exchanged in open market; the worth of an object in purchasing other goods; the exchange power which one commodity or service has in relation to another; price or the amount for which a thing can be sold." (39 Cyc. 1117.)

ket value" is the price at which a seller willing to sell at a fair price and a buyer willing to buy at a fair price, both having reasonable knowledge of the facts, will trade.

Current Assets

The current assets are called "quick," or "floating," or "liquid," or "working." The author prefers the term "current" for those assets which represent cash or items which will or should be converted into cash during the current operations of the business.

Definition of Term "Current Assets."—The agreements under which many issues of preferred stock, notes, bonds, and other obligations have been placed, contain stipulations as to the percentage ratio of current or quick[2] assets to current liabilities, or the reference is to "net current assets." The absence of uniform practice is recognized in most cases by the enumeration of the specific items which comprise the assets and liabilities which are to be included. The main purpose of the provisions is to prevent any undue expansion, particularly of fixed assets. It is believed that good accounting practice is well enough settled to justify definitions which will control the classification on any balance sheet and do away with the necessity for specifying the items to be included. In some agreements deferred assets are excluded from the definition; in many carefully worded agreements prepaid items are specifically included. A definition or classification which excludes all deferred assets may work an unintentional hardship. Considerable savings are made by prepaying interest, insurance, and similar items, therefore no definition should be so inelastic as to place a premium on the absence of deferred asset items irrespective of the merits of the case. It might be possible to invent ledger captions which would help

[2] As the words "quick" and "current" are synonymous and the latter is in more general use, it will be used exclusively. In bankers' circulars the words are used interchangeably in referring to the same items. In the balance sheet of one well-known concern the words "current," "quick," and "working" are used interchangeably.

evade specific provisions, whereas if the intention is clear and the definition is elastic there can be no evasion.

Settling first the matter of intention, there is little controversy regarding the meaning of the term "current assets." Speaking generally, the term includes only those assets which are for sale in the ordinary course of business. If any doubt exists, it can be settled by the answer to the question: "Is it desirable or is it the purpose of the business to convert these assets into cash at the earliest practicable moment?" This is not an entirely satisfactory definition because it permits the inclusion of "slow" assets and others which could not be dispensed with unless the business were to liquidate; it lays down no rule for valuing inventories; it omits prepaid expenses. As the intention is clear, the definition also can be clear. The intention when related to a going business is to include all items of a "cash" or realizable nature as distinguished from fixed or unrealizable assets. If we discuss what must be excluded, we will better understand what to include.

Classification of Assets.—The asset side of a balance sheet should be divided into four main groups:[3] (1) current, (2) fixed tangible, (3) fixed intangible, (4) miscellaneous. These are further divided as follows:

1. Current Assets:
   - (a) Cash (cash "items," if any, must be distributed under some other caption).
   - (b) Items the equivalent of cash, such as postage, revenue and war savings stamps.
   - (c) Accounts, notes receivable, and acceptances from trade debtors, net of reserves for bad and doubtful accounts, the maturities of which are less than one year from the date of the balance sheet.

[3] These captions are not in general use; many agreements, however, are being made under which it is compulsory to segregate the assets into the specific groups mentioned.

(d) Instalment or deferred accounts and notes receivable, even though maturing more than one year from the date of the balance sheet, provided that such accounts or notes were accepted in ordinary course and conform to the terms which generally prevail in that line of business.

(e) Inventories of raw materials and finished goods, operating supplies, goods in process, and ordinary maintenance material and parts.

(f) Accounts and notes receivable from stockholders, employees, and others when separately stated on the balance sheet and known to be collectible within less than one year.

(g) Advances on contracts; prepaid expenses, such as interest on bank loans; prepaid royalties, insurance, and taxes; and all other items, such as current advertising, catalogs, and booklets, which directly relate, as does the inventory, to current operations and which when and as used are operating costs. This class is limited to those items which would be paid in any event after the date of the balance sheet and which are not indicative of any expansion of the business.

(h) Securities and other items which are the equivalent of cash and which are intended to be or which readily may be converted into cash.

2. Fixed Tangible Assets:

(a) Plant, including land, mines, other natural resources and development costs, machinery, equipment, automobiles, furniture, tools, containers, and patterns.

(b) Inventories of plant items, such as construction and renewal materials and parts other than for maintenance.

(c) Items the same as (c) and (f) above, the benefits or maturities of which are more than one year from the date of the balance sheet.

(d) Deposits, prepaid items, etc., the benefit of which extend beyond one year from the date of the balance sheet.

(e) Securities of subsidiary or affiliated concerns. (If a consolidated balance sheet is not made up, advances to, and accounts receivable from, such concerns should be included in this group.)

(f) Fund investments when the assets in the funds are to be applied to the reduction of debts or for reinvestment for the purposes of the concern.

(g) Patents when acquired for cash.

3. Fixed Intangible Assets:

(a) Patents, trade-marks, copyrights, subscription lists, etc.

(b) Good-will.

(c) Deferred items, such as discount on bonds, and deferred items of an extraordinary nature, such as organization and exploitation expenses.

4. Miscellaneous Assets:

(a) Fiduciary and other items, such as claims and disputed items which cannot be included in the foregoing classifications.

(b) Discount on bonds.

If the audit occurs some time after the closing date, numerous entries and changes are apt to have been made in the current assets subsequent to the date of closing. These must be carefully scrutinized for the light they may shed on the past.

At the outset the auditor should carefully read the schedule of assets to be verified and then outline a definite plan having as its basis the connection between the entries supporting the asset accounts and the *things themselves*. In other words, all of the

assets which *should be on hand* must be accounted for, including both those on the books and those which may have been omitted from the books.

NET CURRENT ASSETS.—The term "net current assets" is sometimes used in deeds of trust and other agreements for the protection of creditors. The term "current assets" is defined on page 75. The term "current liabilities" is defined on page 223. The term "net current assets" means the excess of current assets as defined over current liabilities as defined.

LIENS AND HYPOTHECATIONS.—Throughout the verification of the current assets the auditor should be vigilant in his endeavor to ascertain whether the title to the accounts—the stock-in-trade, the machinery, and other items—is free and clear, or whether a lien exists thereon which is not fully disclosed in the books and financial statements.

Insurance policies are often good guides to title. The holder of a lien on merchandise or the owner of a chattel mortgage is usually careful to protect his security, and wherever an insurance policy is payable to more than one party "as their interests may appear," the auditor is put on notice that the property insured is not free and clear.

A tremendous business is done by companies which make a specialty of advances upon, or the purchase of, accounts receivable. Some of these companies solicit business upon representations that the transactions will be secret and that no information relative thereto will be available to the customers whose accounts are assigned, or to the creditors whose interest in such accounts receivable is thus subordinated without their knowledge or consent.

In many cases the concerns which secure the advances greatly benefit therefrom, being enabled to borrow in this way enough to finance their businesses properly; instances are known where concerns so financed have thus escaped bankruptcy and have subsequently prospered. Therefore, in general, an auditor should

not take a definite stand for or against the practice, but should reserve his criticisms for abuses or objectionable secrecy.

The absolute necessity for disclosing assignments is pointed out on page 79. An effort may be made to conceal from the auditor the transfer of the accounts, but it should not be difficult to find some trace of the practice; and if any accounts are transferred it is a fair assumption (until clearly shown to the contrary) that all have been transferred. The name of a "discount" company among the liabilities is, of course, ample notice to the auditor; but the name may be unfamiliar, because there are many such companies.

The safest method is first to determine which are regular trade liabilities. After having satisfied himself of their correctness, they may be eliminated from further consideration and the auditor can then devote his attention to an investigation of the origin of the other items.

Loans other than from the banks regularly used by the client are more likely than not to be secured by collateral. The auditor who examines the liabilities with this assumption in mind is on the safe side.

Usually assignments of accounts receivable involve much red tape, such as the authorization of someone in the borrowing concern to collect the accounts and to remit the proceeds to the "discount" company; the preparation of schedules of accounts assigned, collected, etc.; and the payment of bonuses, commissions, interest, etc., at rates much higher than the usual bank rate. These precautions are more common with the "non-notification" companies than the others, because the name implies secrecy, and care is taken that customers shall not be inadvertently notified that their accounts have been transferred as security for loans.

In many cases the expenses incident to the assignment of accounts receivable can be avoided and more satisfactory financing arranged for, as outlined under "Acceptances," page 256.

In many instances goods are received and so-called trust receipts are issued by the consignees. These trust receipts usually

arise out of importations of raw materials shipped sight draft against bills of lading. Arrangements are made with bankers to pay the drafts and release the goods to the purchaser in trust, thus creating a first lien thereon. In form the trust receipts are obligations of the purchaser to account to the banker for the proceeds of the sale of the goods.

The lien of a trust receipt is frequently of temporary effect only, because the goods are usually taken into the purchaser's warehouse and there mingled with other goods, thereby making it practically impossible to follow up and identify the merchandise. When the materials require manipulation and are converted into other forms, the difficulties of identification become almost insurmountable. The title, therefore, which is supposed to remain in the name of the banker, becomes of little value and cannot be sustained against general creditors. There are, however, many exceptions in which the goods can be readily identified and in which the title remains unimpaired.

In all cases in which the circumstances surrounding purchases indicate the possibility of trust receipts having been issued, the auditor must be most vigilant. The author's attention has been called to numerous cases in which balance sheets have contained no reference to existing liens of this nature. If a concern conceals an important fact like this from its creditors, there is a strong likelihood that an attempt will be made to deceive the auditor.

The head of one concern which failed recently, when asked by the officer of a certain bank whether its secured creditors could trace the merchandise on which they had made large advances, said laughingly, "They think they can." This so disgusted the banker that he immediately withdrew a $100,000 line of credit from the applicant and told him that he could not borrow a cent there.

Any information secured relative to liens or encumbrances must be reflected in the report on the audit, as well as on the face of the balance sheet.

PROPORTION OF CURRENT ASSETS TO OTHER LIABILITIES AND CAPITAL.—The rules call for a verification of the assets which *are* on hand and those which *should be* on hand, but the latter term applies to physical existence only and does not mean that the auditor must necessarily pass upon the *propriety* of the aggregates of the various classes of assets. At the same time, in order to be as valuable as possible to a client, whether a borrower or a banker, the auditor should endeavor to determine whether or not the *relative* proportions of cash, accounts receivable, and stock compare favorably with those of the most successful concerns in the same line of business.

This thought is admirably expressed by the president of one of New York City's largest national banks, who said at a bankers' convention:

> I have always claimed that under normal business conditions a stated amount of capital (borrowed as well as invested) should allow a concern in any line of business to carry a certain amount of merchandise. This merchandise later is converted into bills and accounts receivable; later on into cash; and upon these transactions, subject to the charges of conducting the business, there should be realized a certain amount of net profit. All of these items in a well-organized and well-conducted business should be in relative proportion one to the other. And if the best results are to be attained, the management of any concern will see to it that each dollar of its capital carries its proportion of merchandise, and will also see to it that the merchandise is moved rapidly and converted into a bill or account receivable, and that its outstanding debts are promptly collected, and that its cash is used to reduce materially, or entirely liquidate, its indebtedness, thereby saving interest and expense. We have in a number of instances followed this natural sequence in business and have found any number of instances where each dollar of capital (invested or borrowed) was not performing its full duty, and following the matter still further, we found it due to either extraordinary expenses, or losses, or due to indolence and a lack of an aggressive policy in handling the affairs of the concern. These are "earmarks" which will denote a condition of this kind, and we believe that it is our duty to examine these conditions thoroughly.
>
> As an illustration of this, some years ago, a certain firm reported in their statement an invested capital almost equal to the amount of their annual sales. At the same time their statement showed a substantial

liability for borrowed money. It seemed incredible that a working capital invested and borrowed of more than the amount of the annual sales could be correct, but that is what this report showed. Upon closer analysis and further information, it was found that in the accounts receivable of the firm there were many old accounts running years back, which they were carrying as good accounts, and also substantial sums due the firm from the partners, which were, in other words, overdrafts. When the statement was all boiled down, it was found that their actual capital was less than one-half that reported in their statement. These are the "earmarks" which, upon close observation and the knowledge of credit, prove invaluable to one's institution.

It is vitally important in examining and passing upon a statement that one should be thoroughly familiar with the conditions surrounding the business during the year. Conditions may have made it impossible for any concern to make money, and where a concern reports a gain in its capital, one owes it to himself and to his institution to inquire thoroughly and closely as to the causes which produced such a result when all the conditions were adverse.

As an example, we have the accounts of a number of houses in the same interior city in identically the same line of business, and while the amount of their capital varies (and, consequently, their volume of business), we can each year, by working out the percentages, see which concern is obtaining the best results upon its volume of business and the amount of its capital.

From the standpoint of good banking it is not in the province of any bank to furnish permanent working capital for any one of its depositors. A bank whose liabilities are all payable on demand should observe closely the well-established rule that its borrowers should at some time during each twelve months liquidate their indebtedness to the bank for a reasonable period of time. In my opinion, this is neither unjust nor arbitrary, and is dictated by well-demonstrated and sound banking and business logic.

I have always believed that an independent audit by a firm of certified public accountants is desirable. And from the standpoints both of the borrower and the lender, it is wise at least once a year to have the affairs of a firm or corporation examined and audited by a high-class firm of auditors.

It is obvious that no concern can have a "clean up" annually or oftener unless its current assets can be turned into cash within a reasonable time. Therefore, before the auditor commences his

verification of the current assets, he should ascertain, as accurately as possible, the normal proportion of each class of such assets in the average concern in the same line of business as that under audit.

With this as a starting point he is able to determine, as his work progresses, how far from normal the concern is. This information should be of the greatest value to his client.

The attitude of the lender of money is almost invariably influenced entirely by the relation of current liabilities to current assets, because current loans are not supposed to be made on fixed assets. The value of the plant, using that word in the broad sense, in relation to its cost and more particularly to its earning capacity, is a factor which it seems should be given careful consideration by the lender. It would be better, for instance, to lend money to a concern which had a plant of good earning capacity, even though its liabilities were 100 per cent of its quick assets, than to a concern whose liabilities apparently amounted to only 50 per cent of its quick assets but which had a poor plant and which was not making money. There is a direct connection between plant assets and valuations and the income account to which bankers do not always give enough consideration. This subject is more fully discussed under appropriate titles.

CHAPTER VII

BALANCE SHEET AUDIT—CURRENT ASSETS

The verification of assets usually commences with current assets; these are taken up in the order in which they appear in the balance sheet. In this chapter will be discussed: cash; accounts and notes receivable; investment securities; and such deferred charges to operations as are properly included in current assets. Inventories naturally follow accounts and notes receivable but for convenience the discussion is deferred to separate chapters

Cash

This item is considered under the following heads:

Cash in Bank.—If no notice has been given to the client's staff, the cash should be balanced as soon as the auditor can secure access to it. The bank balances should be verified by independent confirmation. The cash transactions since the date of the balance sheet should be scrutinized and the footings proved in order that the balance on hand as stated therein may be shown to be correct.

Where the currency and bank transactions are kept together in the cash book and the auditor does not count the cash until a date subsequent to the close of the fiscal year, he must, in addition to verifying the bank balances as of the close of the year, verify them as of the date of the count of cash. This is absolutely essential when it is considered that, although the cash on hand, which forms only part of the balance at the date of the count, is correct, it does not follow that the total cash is correct.

When the audit occurs a considerable time after the date of the balance sheet, it is customary to secure certificates from the banks covering the balances as of the closing or balance sheet date.

These are reconciled with the books, accepting as a basis the schedule of outstanding cheques shown by the books.

There is always a possibility that a shortage in the cash at the date of the balance sheet may have been concealed by the omission of receipts deposited before the end of the period, included in the bank balance at the closing date, but not recorded in the cash book until the beginning of the succeeding period. For this and other reasons the cash entries subsequent to the closing date should be scrutinized. Cheques outstanding at the closing date should be carefully examined in order to see that they were properly entered on the proper date in the cash account.

It is particularly important to trace deposits entered as made at the end of the period after the close of business but not credited by the bank until afterwards. Such deposits should be credited by the bank on the succeeding business day; if not, an investigation should be made. Where the reconciliation between the bank balance and the cash book is made in the cash book, it is, nevertheless, advisable to examine the cheque stub to ascertain that the balance as shown therein is in agreement with that in the cash book.

Many auditors accept bank pass-books as conclusive evidence, but the author has encountered several cases of fictitious pass-books and two cases where the genuine pass-books were very cleverly altered. Therefore, to be safe, the auditor should have one of his own staff secure the pass-books or statements from the bank, or preferably, have the confirmation of the balances mailed direct to him by the banks. A prominent firm of accountants failed to discover a defalcation in a case which arose in 1920 because the verification of the balance went to the company instead of the auditors.[1]

The auditor should satisfy himself that the cash in banks is free from any liens or offsets and that it may be withdrawn on demand.

[1] It is not necessary in a balance sheet audit to make the same exhaustive examination of the bank account as in a detailed audit, but the auditor must be familiar with various fraudulent devices which are fully discussed on page 502, *et seq.*

PETTY CASH.—Where the petty cash balance or fund called for by the balance sheet is small, it may be unnecessary to attempt to account for it, since it might require considerable time to inspect and prove all of the entries between the closing date and the time of the audit. Usually a scrutiny of the subsequent entries is sufficient.

If the balance is, say, over $100 it should be verified by actual count and proof. In an English case an auditor who failed to verify a petty cash balance of nearly $4,000 was held to have committed a breach of duty. The actual balance was $150.

The balance should consist of actual cash, not memoranda or "cash items." A cashier who is carrying questionable items as a part of his cash balance may borrow money enough on the closing date to enable him to pay the entire balance into bank, or to exhibit the cash to an executive; after doing so the cashier can immediately put the items back into the cash drawer and again withdraw the cash. If there is any suspicion that this is being done, a second count of the cash on hand should be made toward the close of the audit.

Whether this part of the work proves pleasant and satisfactory depends on the auditor. It is quite possible that an auditor, in his desire to jump in without notice, will really upset a cashier who pursues certain routine methods of handling the cash and cash records. First impressions are very important, and it never pays to disarrange the work of a single person in a client's office unless a definite reason exists for proceeding offhand and without giving notice. If the client does not inform his staff that the accounts are to be audited, it is desirable that the auditor take advantage of the opportunity to surprise the man in charge of the cash. Probably more petty frauds are disclosed in this manner than in any other, for too many men are unable to distinguish between their personal funds and those of their employers. Many of these discrepancies are under $100, and if the cashier is given time to put his cash drawer in order, the shortage may disappear. It may be argued that in such a case no great

harm can ensue, because there is no actual money loss to the client. No greater mistake can be made, however, for a man whose moral sense is so blunted that he pilfers a few dollars is on the highway to further frauds and waits only an opportunity to misappropriate anything of larger value on which he can lay his hands.

Usually the auditor is expected. If the audit is a periodical one, the approximate time of commencing is known in advance. If it is a special engagement, in most cases the negotiations with the auditor are known to all in the client's office. Here the auditor can exercise a little tact or diplomacy. The cashier may, for instance, balance his cash late in the day, and if it is much of a task he is anxious to hurry home upon striking a balance. The wise auditor makes it a point to tackle him first thing in the morning at a time when the memoranda of the day have not commenced to accumulate and when the cash book is written up and the footings shown.

Very often slips of paper, tickets, and so-called vouchers make up a large portion of the "cash" in the drawer. In all cases count the actual money first, then list the memoranda. This record should be full and complete, for there may be some delay before it is used again. Cases are known where unauthorized tickets carried as cash have mysteriously disappeared immediately after an auditor's count of the drawer.

If there is a difference between the amount on hand and the balance called for by the cash book or the round sum carried in the ledger as a petty cash fund, it is not wise to assume at once that there is something wrong. The auditor should note the cash book footings, and with this information in his possession, together with his count of the cash drawer, he can afford to give the cashier a chance to hunt for the difference. If the cashier balanced the night before, the error may be in the auditor's own figures. If a shortage exists, it should develop at this point.

When the cash balance consists of several bank accounts or funds, care must be taken to see that the entire balance is verified simultaneously. Instances are known where auditors have been

deceived through one balance, after being inspected, having been transferred and used on a later day in connection with another balance.

Cash in Transit.—Special attention should be given to cash or cheques in transit or said to be in transit at the close of the period, to make certain that the items are in order or that the same items are not included twice. Where cash items are en route from a branch office, the auditor can verify the receipt and entry in the main office books subsequent to the close of the period. Where the cash item is en route to the branch office it is not difficult to ascertain that it has been excluded from the main office cash.

A practice which should be condemned is that of including the receipts of the first few days after the close of the period in the cash of the previous month, reducing accounts receivable by a corresponding amount. It is contended by those who defend this practice that these payments were forwarded to them by the debtors before the close of the period and that these items represent cash in transit. Nevertheless, only such items as represent cash on hand or in the bank at the close of the period should be included in the cash balance.

Bank Overdrafts Should Not be Deducted from Bank Balances.—When there is a balance in one bank and an overdraft of a smaller amount in another bank, it would seem that the overdraft should be deducted and the net amount shown as the balance in banks; in most cases, however, this procedure will not reflect actual conditions. Many banks require minimum balances, so that apparently free balances are not free in fact. Overdrafts must be made good, and when it is obvious that they can only be made good by borrowing, overdrafts should be included among accounts payable.

Accounts Receivable

The term "accounts receivable," when used without qualification in a balance sheet, means an aggregate amount due from

trade debtors, reduced by adequate reserves for bad and doubtful accounts, and excluding accounts which mature beyond the length of credit usually extended in the industry with which the concern is most closely identified.

Other debts may be due which are legitimate current assets but which cannot truthfully be classified as good and due from trade debtors, which have been sold on the usual trade terms. The aggregate of such other items properly classified should be separately stated on the balance sheet so that no one will be deceived.

It is not necessary to state in published balance sheets the gross amount of accounts receivable and the reserves to be deducted therefrom. It is information of interest to competitors more than to anyone else. Opinions differ as to when to charge off doubtful accounts. Some concerns charge off promptly, others carry accounts until the last possible dollar is collected. Large gross amounts and large reserves may give rise to false impressions regarding the aggregate of losses sustained. It is good accounting practice to omit the amount of reserves. It is proper to state that accounts receivable are "net of reserves," but it is not necessary, because an unqualified certificate carries such a statement by implication. Reserves for cash discounts also should be deducted.[2] There is not the same uncertainty about this item because most cash discounts are determinable before the books are closed. For this reason the reserve for cash discounts should not be merged or classed with the reserve for doubtful accounts. One is certain, the other is uncertain.

Other reserves, such as rebates to be paid or allowed after customers buy specified quantities, volume, or amounts, may have to be set up. When not ascertainable for the current period, but probable, some allowance must be made and deducted from gross sales in the current period. Such a deduction may not be proper in computing net income for tax purposes. When the accrued liability is determinable with reasonable accuracy, the

[2] See discussion on pages 231 and 331 regarding differentiation between cash discounts of less and more than 2 per cent.

entries should be made as for other accrued but unpaid liabilities. Likewise, such reserves as those for collection expenses should be entered as accrued liabilities and not as contingent reserves.

The decisions of the courts and good accounting practice agree that net income for a certain period cannot properly be determined unless and until the accounts receivable are appraised and reduced to their actual value. Any contention that "gross" and "net" income mean the same thing until there is a final determination of value is fallacious. The proper rule is to include in current net income only such gross income as will be converted into the equivalent of cash. To set up in one period gross sales, or income, aggregating a given amount, and to include in a succeeding period the deductions therefrom, is bad law and bad accounting. If accounts and claims are so uncertain that the *net* value cannot be determined or estimated with reasonable accuracy, they should not be set up as assets at all.

Trade Debtors.—When the item "accounts receivable" appears without qualification in a balance sheet, those who rely on the balance sheet are justified in assuming that the item represents a current asset, fully collectible within a period usual to the trade or industry with which it is most nearly identified, and only containing items due from individuals or concerns not a part of or connected with the business itself; in other words, accounts due from the public.

In a long-established business having fairly constant sales, the accounts can be valued on a basis of past results. Ascertain the percentage of bad accounts in past years and apply this percentage to all sales up to the closing date. When market prices of commodities are declining, accounts receivable which are good under ordinary circumstances may require special attention; past experience may not be a safeguard. A large fur concern which had been successful sold furs in February, 1920, to the extent of $22,000,000. Only one-half of the accounts

had been collected within a year; the balance is reported to be uncollectible.[3]

The sales, for, say, the last month, should be scrutinized (not footed) to ascertain whether or not there is any evidence of predating, billing to fictitious customers, or including as sales at full prices consigned goods or goods sent on approval. It may be found that, in good faith, consigned goods are included among the current sales, following the past custom of the concern, but this does not justify the practice, which results in anticipating profits that have not been earned. It also improperly increases accounts receivable.

Accounts current should be obtained for all consignment accounts. Any unsold goods at time of closing should be added to the inventory and priced on the same basis as the rest of the inventory. If the goods are salable and practically sure to be sold, accrued charges thereon, paid by the consignor, such as freight and insurance, may be added to the inventory prices.

If past experience is not available, and in a period of abnormal conditions such as obtained during and after the war, the outstandings must be valued on their merits. The experienced auditor has a general familiarity with the normal volume of outstandings which various classes of business and different concerns in the same line of business are expected to carry, and he, for his own information, should compare the relative outstandings of each business to the gross sales. The value of such a comparison is apparent at a glance, for negligence and laxity stand revealed in a manner which might not be apparent in a routine audit. The best method of collating such data is to compile statistics covering gross and net figures and the percentages based thereon at the close of each audit. In time a vast quantity of information will be available, at a moment's notice, for comparative purposes.

The auditor must not hesitate to use his own judgment when abnormal conditions prevail. Many merchants took advantage

---

[3] *Financial Chronicle*, May 21, 1921, Vol. 112, Part 2, page 2196.

of the moratorium in Cuba and postponed the payment of their accounts. The attitude of creditors in the United States depended on the tax situation and on the showing which it was desired to make. Those who had large profits were anxious to charge off the accounts as bad; those who had no taxable profits were anxious to carry the accounts as wholly good. An auditor could not justify two certificates of audit in one of which an account due from A and Company of Cuba was charged off while in the other A and Company's account was carried as fully collectible. No matter how great the difficulty in arriving at a decision, the auditor would carry A and Company in both balance sheets as good, partly good, or as bad, and as in other cases he would find that the arguments advanced by his clients were strongly influenced by the showing to be made. When dealing with only one client, he must take cognizance of the unreliability of such arguments.

When the list of open balances is compared with the sales ledgers it should be noted whether or not the balances are represented by specific invoices of a recent date; if not, the balances should be analyzed. An old item in a running account or a bill partly paid, followed by others fully paid, usually means that an allowance has been or will be made, or that a defalcation exists.

When the accounts are few in number but large in amount, they may be valued separately.

When it has been decided that an analysis must be made, the work must of necessity be entrusted to a junior with specific instructions to divide the balances into, say:

Over 30 days
Over 60 days
Over 90 days
Special

Discretion must be used in making this division. Generally the total credits to the close of the period under review are applied against a similar amount of debit items and the items not so

canceled are divided into the foregoing classes. As some of the credits so applied may include payments or other credits applicable to recent sales which would not be classed in the 30-, 60-, or 90-day items, it can be seen that the mere mechanical result obtained from the aging of the accounts may be of doubtful value. This rule need not be interpreted literally when it is unnecessary. The rule, however, is a good one and must be observed in spirit, otherwise the auditor subsequently may be charged with negligence. Accounts which are quite old are worthless and the auditor is justified in writing them off unless a very strong argument is presented, supported, whenever necessary, by *documentary evidence*.

When it is considered that in some cases several hundred or even thousand accounts are listed in this process, it can be seen that it should be resorted to only in very special instances. The results obtained from this process, to be of value, must be applied with due consideration to the policies of the concern and the ability of the credit manager.

In lieu of the foregoing the auditor may secure data to value the accounts by simply making a designating mark on the trial balance, or the list of balances, against those items which appear to be overdue. He should subsequently make inquiries of the credit manager regarding such items. From the information secured, a decision can be made as to the percentage of each overdue account which should be reserved for doubtful accounts.

It is a rule of law that assent to the correctness of a balance may be inferred from the retention of an account rendered without objection being made within a reasonable time. The burden of impeaching the accuracy of the account, for fraud or for mistake, is cast upon the complaining party; but the only proper test of ability to pay is *payment*, and where this is delayed an unreasonable length of time, the inference is that it is lacking.

The auditor must ascertain whether any accounts are pledged or assigned. This is frequently done without any record thereof being made in the books.

The following suggestions will be found useful in fixing upon a valuation of overdue trade accounts:

1. Have the terms of credit been habitually ignored? If so, the debtors may be perfectly good, but such accounts should be given special attention by the credit manager.

2. If payments are being made on account, are the balances being increased or decreased? If the former, this is prima facie evidence that debtors are approaching the time when all payments will stop. This is a class of accounts which deserves more attention than it receives. The auditor should keep this point in mind, and a word of advice from him may save ultimate loss. Salesmen relinquish these accounts very reluctantly, but they are not the best authorities on the ability of debtors to pay.

3. If credit has been stopped and no recent collections appear, ascertain if the accounts have been placed with attorneys for collection.

4. If in the hands of attorneys, ask for the correspondence. Unless frequently checked up, the debtors will not pay. So long as their money lasts, or so long as they desire to preserve their credit, debtors pay those who press them hardest.

5. If debtors who have paid cash commence to give notes, ascertain whether sound reasons therefor have been offered and whether the change has been approved by someone in authority.

In most cases, those in charge of the outstanding accounts are too optimistic. Nevertheless, their knowledge must be utilized by the auditor. He discounts their estimates as much as is necessary and draws his own conclusions.

A certificate as to outstanding accounts should not be given unless the schedules of accounts have been compared in detail with the customers ledgers, and the footings of the schedules verified. The procedure in this case should be the same whether or not a controlling account is kept, but this rule may be modified if the concern in question has a very large number of open accounts which are subject to internal check.

In a balance sheet audit the auditor is more concerned with the

value of the accounts as a whole than with the balancing of the books, but in all cases one phase of balancing must be kept in mind. When the accounts receivable controlling account exceeds the aggregate of the detailed schedules, the auditor is on notice that a defalcation has taken place or that some other irregularity exists. Unless the cause of the discrepancy is discovered, a book, and probably an actual, loss will be realized. The total amount to be collected will depend on the individual accounts, not on the controlling account, and if the latter cannot be fully supported by good accounts the excess must be written off.

Allowance must be made for discounts which are deducted by customers and which, although termed cash discounts, are greater than a concern pays for the use of money. In a stable business it is usually possible to deduct a fixed percentage from all the outstandings. If special discounts are given, it may be necessary to classify the balances before determining the deductions to be made. Current sales may have been made with datings some days in the future, the discount period in which case may terminate, say, forty or seventy days after the date of the invoice instead of ten days. If freight allowances are permitted, care must be taken to see that adequate provision is made therefor.

Miscellaneous Receivables.—The foregoing comments refer to trade debtors and apply chiefly to mercantile and manufacturing concerns. The same principles govern the verification of the outstandings in enterprises which are not generally classified as mercantile or manufacturing.

For instance, real estate agents, as well as manufacturing establishments, may show on their balance sheets large items which represent real estate rentals uncollected. Likewise, stockbrokers carry very large assets which represent balances due from customers. The balance sheets of financial institutions and of enterprises which own investment securities contain items of interest and dividends due, but not collected. The balance sheets

of commission houses show commission and other charges as accounts receivable.

In all cases the auditor must satisfy himself:

1. That the items constituting the balances are bona fide, and
2. That the balances have not been liquidated in part or in whole.

The rules for verifying these requirements do not differ in principle from the rules enumerated for testing the accuracy of balances due from trade debtors.

Amounts Due from Affiliated Companies.—Amounts due from affiliated companies should not be combined with those due from trade debtors and shown as one amount on the balance sheet, because the use of the expression "trade debtors" or "accounts receivable," if it is not qualified, will be understood by the person who reads the balance sheet, and reasonably so, to mean accounts due from customers. Advances to affiliated companies, therefore, should be stated separately, and they should not be included in the current assets except to the extent that they may be represented by the net current assets of a subsidiary. In some cases all or part of the advances may be represented by permanent improvements or other fixed assets of a subsidiary, and if such is the case, that part of the advance so covered by fixed assets of the subsidiary should appear in that section of the balance sheet in which the fixed assets of the parent company are stated.

The foregoing comments apply to a balance sheet of the parent or holding company in which the subsidiaries' accounts would not be consolidated in the usual manner with those of the parent company. It is generally preferable to prepare a consolidated balance sheet, because no question can then arise as to the grouping or position on the balance sheet of the subsidiary companies' assets and liabilities, which will be combined automatically with like assets and liabilities of the parent company.

This rule is inflexible in every case where the amount is other than negligible. If objection is made on the ground that it unfavorably affects the balance sheet, that is merely corroboration of the sound reasons upon which the rule is based.

When a consolidated balance sheet is made, such items, of course, disappear, and no issue is raised. When a consolidated balance sheet is not prepared, the rule stated on page 89 governs, viz., the term "accounts receivable" when stated without reservation means that the aggregate thereof is due from the public and that the entire amount will be collected within a reasonable time. Accounts due from affiliated or subsidiary concerns may be collected in due course or may have been collected before the balance sheet is issued, but the principle is precisely the same as if no collection had been made. The chief reason for the rule is to inform those who see or rely on the balance sheet whether or not there was *at the date of the balance sheet* any amount due from affiliated or subsidiary concerns.

It can be shown, if desirable, that the latter are able to pay and will continue to be able. Even so, it is again emphasized that those who *may* rely on the balance sheet wish to form their own conclusions or make their own inquiries regarding all accounts carried as current assets due from what are known as affiliated interests.

When the amount is trifling it should be included among other accounts receivable, following the general rule that small items of assets or liabilities should not be separately stated in a balance sheet.

Naturally, the question arises: What affiliation must exist in order to require a separation of items? It is not possible to fix a percentage of ownership because the point at issue depends more on control than on ownership. Ordinarily, the ownership of more than a majority of the stock of an affiliated concern is necessary to insure control, but in many cases full control is exercised although there is less than a majority ownership. If a definite rule is needed, it might be stated to be that when there is more than

50 per cent ownership in an affiliated concern, the debts due from such concerns must be stated separately in the balance sheet; when there is less than 50 per cent ownership and it appears that control is exercised, the items should be separated; when there is less than 50 per cent ownership and it does not appear that control is exercised, the auditor may use his discretion.

Amounts Due from Officers or Employees.—The remarks under "amounts due from affiliated companies" apply with equal force to amounts due from officers, directors, stockholders, employees, or others connected with the concern. The amounts shown by the books to be due may be perfectly good or in fact may have been paid immediately after the date of the balance sheet. Nevertheless, if the amounts are at all substantial they must be separately stated on the balance sheet. Former advances or loans may have been repaid but that does not mean that other advances will be repaid.[4] Those who rely on balance sheets wish to know about customs as well as about figures.

Auditors will do well to consider that several members of the American Institute of Accountants have been suspended from membership for failure to state separately on balance sheets amounts due from officers and others, when the amounts due were substantial and those who relied on the balance sheets were

[4] "Usually such a condition is not indicative of fraud. It is merely evidence of an indifference to the legal requirements in regard to corporate funds. It may indicate a laxness so great as to induce fraud on the part of the officers. The auditor should call attention to the fact that the most charitable interpretation which can be put on such drawings is to call them loans, which would be subject to recovery if required for the payment of liabilities, and that the least charitable interpretation is to call them misappropriations. If the withdrawals are legitimate they should be authorized; in any event the attention of the directors should be called to their irregularity. Debit balances of this kind are often found in close corporations, particularly if the business has previously been conducted as a partnership. The former partners, having become accustomed to taking drawings, continue to do so, not realizing that partners may be allowed to take drawings in any free and easy manner they desire, while the profits of a corporation can be legally divided only by the formal declaration of a dividend. If these accounts represent drawings against an accumulated surplus account, the auditor should advise the declaration of a dividend to cover, so as to legalize the withdrawals and relieve the stockholders of liability to creditors on account thereof in the event of future financial difficulties." (H. A. Finney, *Journal of Accountancy*, March, 1921.)

deceived. When any doubt exists let this question settle it: Are the items in question due from the public, that is, those with whom all relations are, in effect, at "arm's length," or are the relations such that affiliation or self interest or internal factors affect or may affect prompt and full collection? As to whether or not amounts due from employees should be included in current assets depends on circumstances. If the auditor is sure that the accounts will be repaid and will not be replaced by similar items it would be proper to include such accounts in current assets. Accounts due for stock sold to employees on a partial payment plan may or may not be current assets. The most important point to observe is to state such accounts separately in the balance sheet.

Segregation of Accounts and Notes Not Due Within One Year.—The item "accounts and notes receivable" appears second in the list of current assets because of the expectation that in point of convertibility into cash the item ranks next to the cash item. Those who use balance sheets are justified in such an inference; therefore it is proper that there should be a segregation of any items which probably will not or cannot be collected within a reasonable time—say, one year from the date of the balance sheet. In the case of concerns selling goods or real estate on the instalment plan, everyone is on notice that collections from the receivables will be spread over a long period of time; but in the case of industries where the usual terms of credit are 60 or 90 days, the designation "current" would be a misnomer if any substantial part of the accounts of any one concern were not due for nine months or a year. The point is specifically covered in practically all deeds of trust wherein the term "current assets" is defined, and under the terms of which accounts and notes receivable may not be included unless good and collectible and due and payable within one year.

Fictitious Accounts Receivable.—In many balance sheets, accounts receivable from customers are mingled with other debit balances. The latter may include advances to salesmen and

others; overdrafts of officers; claims against railroads, creditors, or the government for alleged overcharge of duties; prepayments on purchase contracts; guarantees; etc. Not infrequently considerable amounts are included which represent charges to vendors for goods returned. Such balances are rarely settled in cash. Where the open items consist of cash debits, it may be assumed that purchase invoices exist which have not yet been credited to the account. The distinction to be drawn here is that instead of dealing with the accounts in groups, each individual account must be scrutinized and valued on its merits.

Sometimes these so-called accounts receivable are not "receivable" at all, but are merely advances under contracts, the goods or materials purchased not being delivered at the date of the balance sheet. One experience of the author's illustrates this point.

An iron company was under contract to purchase large quantities of ore and to make periodical payments irrespective of actual deliveries, except that the ore was all to be delivered within one year. After the payments commenced and before any ore was received, its books were closed. The payments were included among the regular accounts receivable in the balance sheet. The author separated the items and set up a new balance sheet showing the advances under their proper caption.

The balance sheet was to be used as a basis of credit, and a banker or creditor would have been grossly deceived if the adjustment had not been made, since the item "accounts receivable" in a balance sheet, stated without qualification, may be regarded as one of the best current assets; whereas in this case not one cent could be realized on this item until the ore was shipped and received, converted into iron, the iron sold, and the proceeds collected. In other words, it was a deferred asset of the most extreme kind. The president of the company strenuously objected to the restatement of the balance sheet, saying that it had always been done in the old way and that the change, if made, would attract unfavorable attention.

Although changes in the form of annual statements, due to

previous erroneous practices, are always to be regretted, yet it is clear that the facts must be shown if known. In this instance the balance sheet was restated in correct form, and has been so stated from that time.

In another instance a silk merchant had made advances to a manufacturer. These advances amounted to several hundred thousand dollars and were included in the aggregate of his accounts receivable without any explanation. He had secured a large line of credit based chiefly on his outstandings. Investigation disclosed the fact that the advances carried with them the ownership of several mills which were being conducted at a loss, so that the accounts, instead of being current accounts receivable worth their face value, represented real estate, machinery, raw material, manufactured and finished goods, the highest total value of which fell far short of the aggregate advances.

In a recent bankruptcy case it was found that among the accounts receivable, as theretofore carried on the balance sheet, there was an item of $58,000, representing the amount of an embezzlement committed by an employee seven years previously. Part of the time the account was transferred from "accounts receivable" to "investments." It was explained that it was the intention of the company to deduct an amount each year from the profits until the entire sum was cleaned up. It certainly required a vivid imagination to call this item a current asset!

The caption "accounts receivable" is sometimes used to cover deferred charges to operating, such as rents paid in advance and similar items. In no sense of the word are these accounts receivable. The test is: Will the balances be liquidated in cash in due course? Of course nothing can be realized by a going concern from such accounts, and in the case of a liquidation no funds arising therefrom will be available for the payment of debts.

Instalment Accounts

In several lines of business sales are made or contracts are executed under conditions which require time to consummate, or

they are payable in instalments. It is customary to charge the total contract to the debtor and to credit the collections on account as they are made. Experience has demonstrated that many of these contracts are not carried out, in which case the balances due are uncollectible. If a business has been established for a number of years, past results may be used as a guide in valuing the outstandings, but if the business has been recently established, great care must be taken. The first point to consider is the character of the contract and description of the subject matter.

In the case of piano contracts where a material first payment is collected, and where the piano can be taken back without excessive cost, the loss is small; it is large in the case of contracts for correspondence courses and books. It is not usually considered worth while to attempt to reclaim books and lesson papers, although title does not pass until the final payment is made, nor is it usually worth while to enter suit for collection of the balance due. Therefore, in all cases where this class of contracts is entered at the full purchase price, a considerable reserve must be provided for bad debts and collection expenses.

It is permissible to include good accounts, less proper reserves, among current assets. Unless there is some special reason for it, it is not necessary to classify the accounts according to maturity dates unless the average life of the accounts exceeds that of representative concerns in the same kind of business. Those who use the balance sheets should have full knowledge of the facts, but it is not always considered necessary to disclose too much information on the balance sheet. Those who are entitled to it can readily secure information such as the average life of the outstanding accounts.

The United States Treasury has made it possible for concerns selling on the instalment plan to postpone the taking (and taxation) of profits until collections are made in cash.[5] Prior to ac-

[5] For details of the deferred profit method and instructions for changes in accounts and balance sheet, see *Income Tax Procedure*, 1921, pages 363–373.

tion by the Treasury it was considered good accounting practice to treat profits as earned in the period during which sales were made, adequate reserves being set up for bad debts and collection expenses. As most concerns benefit largely by the special favor of the Treasury, it may be assumed that their income statements and balance sheets reflect tax rather than actual conditions. Auditors do not oppose the change, provided the facts are clearly shown in the balance sheet, because balance sheets on such a basis are most conservatively stated.

Export Sales

When sales of goods to be exported are paid for in advance, or at time of shipment, no question arises as to the period in which the profit should be taken. When goods are shipped to foreign customers against open drafts, it may be inadvisable to anticipate the profit, because it frequently happens that drafts are not honored and the goods must be resold.

There can be no fixed rule which will cover all cases. Good accounting practice permits one of two methods:

1. When the goods are not paid for in cash, and if there is some doubt that the goods will be paid for, the export concerns may carry the goods as part of their inventories priced at their actual value on the spot where they happen to be.
2. When there is little doubt about the collection of the proceeds of the drafts and ample reserves are created for doubtful accounts, such shipments may be treated as sales and the uncollected proceeds may be treated as accounts receivable at their net value.

Accounts Collectible in Foreign Currency.—The fluctuation of foreign exchange rates and their depression below "par" introduces uncertain features into the valuation of foreign accounts.

These conditions arise principally under the following circumstances:

1. When accounts receivable or payable are to be settled in terms of foreign money.
2. When foreign business is conducted through branches located abroad or through foreign subsidiary corporations.

The United States Treasury Department has approved, under certain prescribed conditions, the deduction of exchange losses from taxable income. The correct accounting treatment of such losses, therefore, becomes a prerequisite to the determination of proper income and profits tax liability.

Determining the value of foreign accounts receivable to be settled in terms of United States money embraces no problems arising out of the exchange situation. When transactions are to be settled in terms of foreign money, the accounts should also be kept in the money terms of the foreign country.

The open items in a foreign account should be identified and the differences between the dollar value at the exchange rates prevailing on the date of the origin of the transaction, and the dollar value of the foreign money received or paid as of the date of the settlement on the closed transactions which represent exchange losses or gains, should be transferred to an income account. The accounts which remain unsettled at the date of audit should be valued at the current exchange rates on the closing date.

If the foreign activities consist entirely of trading, and the foreign assets and liabilities are all of a current nature, the conversion of their value into terms of United States currency would be made at the prevailing exchange rates.

If the foreign activities include both manufacturing and trading, and the assets include, in addition to current items, fixed investments in the form of plant and equipment, these fixed assets should receive further consideration.[6]

[6] For further discussion of this subject, see under "branch accounts," page 67.

Deposits

Another class of items sometimes included in the current assets is cash deposits put up as security under a lease for the faithful performance of a contract; as security for costs, etc., in an appeal to a higher court; by agents who have ordered goods in advance, such as automobiles; with public utility companies, etc.

In these and many other cases, the proprietors of a going business feel that the cash so paid out is a good asset. Frequently they either count on getting back the cash itself or they know that the deposits will be applied on purchases. When deposits are known to be repayable within a short time or on demand the items should be included in current assets.

In the case of leases, etc., the cash may be returned, but the period of realization is most uncertain and cannot be depended upon as a source of funds available for other purposes than the special one for which the deposit was made. The landlord who holds a cash deposit as security under a lease will probably require the same or a larger amount upon renewal. In many long leases the deposit is to apply on the last year's rent. If there is no renewal, the landlord may hold deposits for several years pending the settlement of a claim for injury to the premises.

In the case of advances it is true that the deposits will be applied on purchase contracts, but this is in effect a prepayment and no cash will be returned which can be paid to other creditors.

For all practical purposes, therefore, these items are a part of the fixed or deferred assets and furnish very poor security for unsecured creditors.

Verification of Outstandings by Correspondence

There is but one absolute method of ascertaining the accuracy of the aggregates shown on the balance sheet as due from trade and other debtors. This is to procure an acknowledgment of the debt from the debtor. This is impracticable in most cases, but wherever the opportunity exists the auditor should verify the

correctness of the outstandings by requesting confirmations by direct correspondence with the debtors.

This subject is discussed more fully on page 525.

Notes Receivable

This account should include only unmatured notes free from liens. Notes on hand should be examined as to amounts, maturities, signatures, and indorsements. As a rule the dates and the places where payable are not important to an auditor. All notes receivable should be examined at the same time in order to prevent substitution. Notes out for collection should be listed and confirmed.

In most respects the valuation of notes receivable should be made along the lines indicated for accounts receivable. In some trades notes are given by concerns of the very highest standing, as, for instance, in the silk and jewelry trades. In other lines, such as the automobile and grocery trades, notes are considered a sign of weakness. The first consideration, therefore, must be as to the custom of the particular business under review. If it is usual to accept notes from first-class debtors, the notes are valued in the same manner as book accounts. (See page 91.)

If notes have been accepted from other than trade debtors, or if it is not the general custom of the trade to give notes, then each individual note must be valued on its merits. The examination should, of course, cover notes under discount as well as those on hand. The former should be verified by correspondence with the bankers, or by inspection of the discount records. Inspection, however, must not be confined to an examination and listing of notes on hand, because part thereof may have been paid; or, if overdue and still carried in the notes receivable account, they may have been charged back to the makers' individual accounts. Care should be taken, therefore, to reconcile each note comprising part of the notes receivable ledger account with the notes themselves, or other satisfactory records.

An effort should be made to ascertain whether any notes represent renewals, and, if so, the original dates should be noted.

Demand notes and all others upon which partial payments *may* have been made should, when feasible, be verified by correspondence. The auditor is charged with knowledge that partial payments are frequently made and care is not always taken to indorse such payments on the notes.

If notes are not paid at maturity, they should, as stated, be taken out of the notes receivable account, since the latter account should represent unmatured notes only. It may be feasible to carry dishonored notes in a separate account, but it is proper accounting practice to debit the personal account of the debtor with the amount of the note and the protest fees and to include the debt among those of the class to which it belonged before it was converted from an account receivable into a note receivable.

Thus, if a grocer sells sugar to a customer, takes a note for the amount of the sale, is unable to collect when due and therefore charges the note and protest fees back to the customer's account, he should include the new balance among his trade debtors. The auditor, in valuing the accounts, should estimate the worth of this account taking into consideration the facts as shown on its face.

Protested notes are frequently paid thereafter, but they cannot be classed with accounts not due, or with those overdue from chronically slow payers. The maker of a note who fails to meet his obligation at maturity is never a desirable customer, and subsequent credit extended to such customers invites ultimate loss.

There are exceptions to this rule in the case of such concerns as agricultural implement manufacturers with whom it is the custom to take notes for a large part of sales. Many are not paid during years of crop failures. These overdue notes are considered almost as collectible (so far as ultimate realization is concerned) as the unmatured ones, and, since it is more convenient for the collection department to handle them as notes than as part of open accounts, they are not charged back to the customers' accounts. Under such circumstances, when stating the item

"notes receivable" in the balance sheet, the auditor may not consider it necessary to separate the overdue and not due notes, but he should be sure that one class is as good as the other, or that a sufficient reserve has been created for the probable loss.

Trade acceptances should not be confused with notes receivable. They should appear as a separate item in the balance sheet.

Notes Receivable Discounted—The balance sheet should show the notes or acceptances under discount because a contingent liability thereon exists. They are hypothecated assets against which a loan has been secured from the bank, therefore the aggregate under discount should be shown in the balance sheet.

Formerly when notes receivable from good customers were discounted, the merchant or manufacturer was inclined to look upon this transaction as, in effect, the sale of an asset, which was thus removed from further consideration so far as the financial statement was concerned. In other words, he considered that he parted with his ownership of the item to the bank and looked to the bank to collect from the customer. It is true that the discounter of the note was required to indorse it, but the contingent liability existing because of the responsibility of the indorser for payment to the bank, if the maker of the note defaulted, was not considered of sufficient importance to make it necessary to refer to it on the balance sheet.

Such an attitude might have some justification if practically all discounted notes were paid promptly at maturity, but of course, this is not the case. It is almost needless to say that the attitude of auditors has changed radically as respects reference to notes receivable discounted; in fact it is no longer discretionary to omit reference to them in the balance sheet.

It has been claimed that the proper method is to show the amount under discount on both sides of the balance sheet, since they are in a very real sense assets hypothecated with the bank as security for loan from it. It is not the general custom, however,

to state the aggregate amount on both sides of the balance sheet, but, if it is not set forth in this manner, then it is obligatory that a note shall be made on the balance sheet, preferably under the liability section, to the effect that a certain amount of notes or acceptances not yet matured are under discount and that a contingent liability exists in respect thereof until they are paid by the makers.

Instances are known of notes for large sums, but with makers of little responsibility, which have been discounted and renewed as long as the banks would take them. If the facts are not known and if several bank accounts are kept, it is easy to shift discounts from one bank to another. Obviously such notes are in reality *notes payable*. The auditor is not justified in certifying to the balance sheet item of notes receivable unless he believes that all of the notes will be paid when due, or unless a sufficient reserve is created to cover probable losses in realization.

Accrued Interest Receivable

This item represents amounts accrued on notes, bonds, and other investments. If the interest is due from solvent debtors who have not defaulted on any previous instalments and if it is due within a few months of the date of the balance sheet, there is no objection to including it among the current assets.

Stock Subscriptions

The uncollected balances due from stockholders on their subscriptions to the capital stock of a corporation are undoubtedly accounts receivable, but it is not considered proper to include such balances with the receivables of any other class. The reason for this is obvious. If the subscriptions are overdue, the fact of their non-collection indicates either poor management or undesirable stockholders. If not due, it affords those who use the balance sheet an opportunity to inquire into the financial standing of the debtors. If good, it not only means that a certain amount of liquid capital will be forthcoming at a certain date, but it also

furnishes evidence that the capital stock is being paid for in cash, and is reassuring as to the future, because the connection of financially responsible stockholders with a company usually means that they are prepared to stand by it and protect their interests. If surely collectible within one year the item may be included among the current assets.

Investment Securities

As we are now discussing current or quick assets, it must be understood that the term "investment securities" does not include securities the sale of which would affect the normal operation of a business.

If stocks or bonds represent control, or a material interest, in other enterprises, the ownership of which is more or less valuable to the holder outside of the direct return thereon, they should be designated as fixed, not as current, assets.

Securities as Stock-in-Trade

Where the purchase and sale of securities is part of the regular business of the firm or corporation, an inventory should be taken the same as is done with the stock-in-trade of other concerns.

It is usually easier to ascertain market values of securities than of other inventories, but greater care must be taken with the individual items. The rule, cost or market, whichever is lower, should govern each item, rather than the aggregate. Under normal conditions and when conservatism is desired, the rule is a good one and applies better than in case of merchandise inventories.

If it is important to have the balance sheet reflect actual values, any security which has depreciated in value should be written down to the market; an apparent rise in value may be taken advantage of when the securities are in active demand and if the market continues in an equally satisfactory condition after the date of the balance sheet and up to the time of the report.

It frequently happens that a few sales of an inactive security

may appear to fix a higher or lower valuation than that at which it is carried, but these sales and quotations are exceedingly uncertain. The auditor, in pricing securities, must be sure of his evidence.

The securities must be examined by the auditor in person or else he must secure confirmations of their existence from those who hold them. It is needless to say that the securities should be counted as soon as possible after the audit is begun, and that all should be submitted to the auditor at one time. If this is not practicable, the auditor should place one of his assistants in a position where all changes between the commencement of the audit and the completion of the verification of the securities can be noted.

Certificates taken out for transfer should be verified by correspondence.

As coupons due at future dates may be detached and sold, the careful auditor will note whether bonds have all of their unmatured coupons attached. This is not usually done in concerns where bonds are frequently handled by different persons; in other cases it is a wise precaution. Where investments are supposed to remain unchanged, it is suggested that the auditor note the serial numbers of a few representative stocks and bonds, and check these numbers on subsequent visits. Instances are known in which securities have been sold immediately after an audit but were replaced before the commencement of another audit.

A director of a bank told the author that in examining securities the same lot of bonds had been handed to him four or five times at each examination during a period of some years. If ordinary precautions had been taken and all the securities ordered into the directors' room at one time—a feasible and simple plan in this instance—a large defalcation would have been prevented or discovered at an early stage.

Liberty Bond Valuations

Due to purely patriotic motives, corporations and individuals during 1917 and 1918 purchased billions of dollars worth of United

States Liberty bonds at par. When the last issue was offered it was known that, owing to the low rate of interest, the bonds would not remain at par; nevertheless the entire issue was sold at par. There has never been any question about the safety of the principal, but during a period of high money rates it cannot be expected that low interest rate bonds will sell at par, no matter how well secured the principal may be. At various times plans have been offered in Congress and elsewhere to insure government bonds selling at par at all times. One suggestion is to refund the entire debt into one issue and have the interest rate adjusted each six months so that the bonds will always sell at par.

In view of the fluctuations of the market and the uncertainty regarding plans to pay a fair rate of interest, most concerns which own Liberty bonds have carried them in their balance sheets at par. The author examined a large number of balance sheets and found this to be the case. Strangely enough, some banks, including the federal reserve banks, the officers of which importuned their customers almost to the point of duress to buy the bonds at par, have been the first ones to criticize the practice of carrying the bonds at par. On the other hand, when taxpayers have written off accrued losses, the Treasury has refused to sanction the marking down from par to market, consequently it may be regarded as good accounting practice to carry Liberty bonds at par. It is necessary, however, that the words "at cost" should appear in the balance sheet, because all Liberty bonds sell at a discount and, if no explanation is added, it might be assumed that they are valued at market prices. It usually is advisable to note on balance sheets the market price when the difference between book value and cost is substantial.

Insurance on Lives of Proprietors

Many concerns insure the lives of officers, executives, or partners for the benefit of the business, the premiums being paid by the concern. The amount carried in the balance sheet for this item should be the cash surrender value of the policy. The

difference between the annual increase in this value and the amount of the annual premiums paid should be charged to income. In view of the cash value of this item it may be classed as a current asset, unless excluded by express terms in an agreement with creditors.

Temporary Investments

Considerable publicity has been given in recent years to the desirability of trading and manufacturing concerns purchasing and carrying a reasonable line of marketable securities to provide for unforeseen contingencies, or for extensions of the business or other extraordinary needs which require funds on short notice.

The theory is that many businesses which have expanded rapidly, and which are apparently prosperous, invest all of their available capital and surplus in extensions of their plant, etc., and that a sudden call for cash finds them in a vulnerable position. This argument is sound enough from a conservative point of view, but it may be urged that the merchant who is too conservative never buys for fear that he cannot sell, and that he may as well invest his surplus earnings in his own business and thus earn a much higher return than can be realized from securities.

These investment securities, to fulfil their function properly, should be on hand (not hypothecated) and should be presented to the auditor for his inspection.

As the whole theory of these security holdings rests on their availability, they should be priced at their fair market valuation as of the balance sheet date, irrespective of cost. Otherwise, they cannot be considered as the equivalent of cash. This, however, is not a hard-and-fast rule. If the variations in market prices are slight and the tendency is upward, no adjustment in values need be made. If the tendency is downward, the auditor should insist on a revaluation unless the variation is so small that the difference is trifling.

A further test of the availability of this class of securities is the existence of a firm market and stable quotations. If not listed on

the stock exchange the bankers who make a specialty of the particular issues should be asked for a "bid-and-asked" quotation as of the date of the balance sheet.

Postage and Other Stamps

In most audits this item is unimportant, but in some classes of business the stamps on hand are sufficiently large to require attention. This is particularly true of mail-order houses and of stock-brokers, who usually carry large quantities of transfer stamps.

The principal reason for presenting the matter here is that it gives an auditor an opportunity to inquire about the stock of stamps on hand and to look into the method of handling them. So much carelessness exists in this matter that it is well worth investigating.

Deferred Charges to Operation—Prepaid Items

In nearly all balance sheets items appear which can be classified under this caption, although in many cases where there are only one or two accounts, such as prepaid insurance, rents, etc., there is no grouping, but the items are stated in detail. Some deferred charges to operation are properly included as current assets and some are not. Good accounting practice permits the inclusion among current assets of all prepaid items, such as prepaid rent, insurance, interest, taxes, royalties, and all other items which are chargeable to current operations or expenses and which as a part of the current and necessary cost of conducting a business may reasonably be expected to be reimbursed to the business. The reimbursement must be as probable as the realizations through sales of raw materials and other operating costs. In the opinion of the author it is improper to class as current assets accounts or notes receivable which do not mature within a year, and stock-in-trade which cannot reasonably be sold within a year, except in those industries in which long-time realizations of "current assets" are recognized as usual and proper. Under the

same principle, prepaid items which are not properly chargeable to current operations within a year are not current assets. Deposits under ten-year leases, which are to be applied to the rental for the last year of the lease, are not current assets during the first nine years. Prepaid discount on a four or six months' bank loan is a current asset, but prepaid discount on a long-term bond issue is not a current asset. Perhaps the discount for one year might be deemed to be a current asset, but the point is rather too fine to be good practice. Current advertising, seasonal catalogs, and similar advance expenditures to be used in the immediate future as part of the *usual* operations of the business, are current assets, but special expenditures for advertising and exploitation are not current assets.

The items to be classed as current assets depend on circumstances. There is no inflexible rule and the auditor must use his judgment. In all cases, however, the general principle underlying the term "current assets" must be adhered to, viz., "current assets consist solely of those which are the equivalent of cash or which through the normal operations of the business will be converted directly or indirectly into cash within one year from the date of the balance sheet."

The auditor cannot verify the accuracy of the book figures unless an analysis is made of the charges to the various accounts. As this subject is discussed fully in the chapter on the detailed audit (page 569 *et seq.*), no further comment is required here.

CHAPTER VIII

INVENTORIES—GENERAL PRINCIPLES

Inventory valuations present few problems of principle when times are normal; but times have not been normal since 1916 and cannot be normal until a considerable period elapses after 1921. Times are not normal when goods sell at less than cost nor when prices are inflated.

Until times become normal again, it is imperative that special consideration be given to the principles which underlie balance sheet valuations and the relation of the inventory to the other items in the balance sheet. It will be necessary to compare good accounting practice with expediency, and to discuss the various methods of arriving at "cost" and at "value."

Introductory

Of all items shown in the balance sheet the inventory is most difficult to verify. Cash and accounts receivable present relatively few problems; plant valuation and depreciation are more uncertain from the point of view of ultimate realization, but that uncertainty in a great measure relieves the auditor from most of the responsibility attached to plant valuations; liabilities are determined with comparative ease, but it is not satisfactory to qualify the inventory item in the balance sheet to the point of obscuring its known value. Those who rely on balance sheets want something more than the statement, "cost or market, whichever is lower," whenever apparent market values vary substantially from cost.

Effects of Price Changes.—During the past few years market values have fluctuated so greatly that there has been no

uniform valuation even of basic commodities, for which close and apparently trustworthy quotations are usually available; moreover, when reference was made to many of the published quotations the answer was frequently made, "There is no business being done at those figures." At the close of the years 1917 and 1918, quoted market prices were in most cases in excess of cost; "cost" in turn was often deemed to be excessive and temporary. so that many inventories were priced for balance sheet purposes on a basis which was less than either cost or apparent market. Auditors met this situation by stating in balance sheets that inventories were taken at "cost or less," thus meeting the requirements of those who demand that balance sheets show inventories priced on a conservative basis. This was the first apparent departure from the rule, "cost or market, whichever is lower"; it was not an actual departure—the apparent departure lay in an erroneous interpretation of the word "market."

The net result of violent price fluctuations and of profits taxes and other war conditions has been an almost complete upsetting of uniformity of procedure in the valuation of inventories. Inevitably there came a complete reversal of the 1917 and 1918 conditions, and, generally speaking, at the end of 1919 everybody wished to disregard "cost or market, whichever is lower" and to use still lower prices, arguing (correctly as it turned out) that the cycle of inflation was on its last lap. At the end of 1920 also, there was manifest a desire to ignore the rule, "cost or market, whichever is lower," for many inventories were valued at cost or market, whichever was higher, while in some cases a middle ground was selected.

It is claimed that this condition is temporary, but the upturn from 1916 to 1920 and the downward trend from 1920 mark a period of at least six years. If at the end of 1921 many commodities are no longer selling in quantities below the cost of production, it may be that there is a commencement of a normal period. One year, however, cannot be called a normal period, so that we find it necessary to discuss conditions which have existed for

some years and which remain largely unchanged at the end of 1921.

Accounting for Fluctuating Inventory Values.—When there are no substantial changes in costs or sales prices, inventories are properly valued at cost. The income accounts of the preceding and succeeding periods are not affected by the quantity of unsold goods, and the balance sheet reflects current values. When there are substantial variations in costs or sales prices, the carrying forward of inventories at cost may misstate the income account of two periods, and the balance sheet is equally misleading if it shows the inventory at cost when the market is substantially above cost; or at "market" when the apparent market is much below cost although the actual market may not be as low as nominal quotations may indicate.

When there is a change in partnership interests there should be a new balance sheet reflecting actual rather than book values; the most important changes usually are in the inventories. A new partner is not willing to buy into a concern which carries its inventories at cost when they can be replaced below cost, and a retiring partner is unwilling to sell goods at cost which are definitely worth more. There are frequent changes in the ownership of corporations but, owing to the form of organization, it is not usual to adjust the accounts when stock holdings change. The author is of the opinion that it is due to stockholders to present to them balance sheets which are as nearly correct as possible; but balance sheets cannot be relied upon if radical changes in the values of current assets are ignored.

The usual arguments against revaluations of inventories are these: When market values are less than cost, writing down to market value may show an apparent profit in the succeeding period if market prices rise above the inventory value, even though cost price is not realized. or the executives may be misled by the adjusted low book values and fix unnecessarily low sales prices. When market values are above cost, the taking up of the

appreciation is anticipating profits which have not been realized. Fortunately the solution of the difficulties is comparatively simple; there has never been any objection to noting in balance sheets market values when they were greater or less than balance sheet or book values. The author suggests a method which does not interfere with the accounting for original costs, when market prices are going down, and which sets up, but does not carry into earned surplus, appreciation in values when market prices are rising. It is suggested that the differences between cost and market prices be carried into reserve accounts which should remain open until the inventories are finally disposed of. Reserves for appreciation in market prices set up on balance sheets should be clearly designated as representing a contingent and uncertain asset; reserves for declines in value should appear on the books of account, but good accounting practice does not require segregation on balance sheets if inventories are shown as being valued at market when market is less than cost.[1]

Relativity of Balance Sheet Values.—The word "relativity" is not often used in referring to balance sheets, nevertheless it should have its place in accountancy terminology. Inventories of goods which are to be shipped immediately after the date of the balance sheet, are often priced far below their actual values. Accounts receivable too recent to question, and notes receivable maturing over a period of years, are honestly assumed to be the equivalent of cash and are often priced far above the actual values. In 1921 a very large concern was liquidated by creditors because of its inability to collect many millions of dollars in outstanding accounts receivable. At the time the accounts were created and for some time thereafter they were all believed to be good. One of the bankers who investigated the cause of the failure said: "The trouble with the business was that good furs were exchanged for poor receivables." The inference is obvious.

[1] For a discussion of this point and forms of journal entries, see article by R. E. Booth in *Administration* for July, 1921, pages 96, 97.

In the case of two concerns in the same kind of business, the value of the inventory of one might be much more than the relative amount of accounts receivable of another. The relation of one to the other is a concrete factor in values and cannot be ignored. It is probable that if the furs had not been sold the relative inventory loss would have been as much as the loss arising from receivables; the illustration is used merely to support the argument that the values of accounts receivable are at times subject to as great fluctuations as the values of inventories. When business is depressed, accounts and inventories probably are worth less than face or market value; when business is good, accounts cannot be worth more than face value, but inventories may be worth more than market prices. If accounting practice at one time ignored the relative values of the two classes of assets, recent developments have proved that hereafter it will not be deemed to be good accounting practice to fail to reflect in a balance sheet all of the elements of value which are useful and necessary to determine true financial condition.

Need of Understandable Rule of Valuation

The author no longer advocates the adoption of an inflexible standard for the valuation of inventories. Before the war it appeared to be feasible to follow the rule, "cost or market, whichever is lower," and great progress was being made in the standardization of that rule which worked well in normal times. The violent fluctuations in prices due to the war largely upset the rule. High tax rates also had an appreciable effect. It is foolish to say that good accounting principles must govern, let taxes be what they may, when everyone knows that tens of thousands of taxpayers have ignored these so-called good accounting principles.

The attempt of the United States Treasury to require that all inventories be valued uniformly at cost was a failure. It is a misleading and unsound method of procedure. The Treasury tried to enforce its adoption under heavy penalties. It was un-

successful and therefore the effort was abandoned.[2] The Treasury subsequently adopted the so-called general rule (cost or market, whichever is lower).

VALUATION PROPOSITIONS TO BE CONSIDERED

Since many inventories at the end of 1917 and 1918 were taken far below current cost or market, and at the end of 1920 at cost, which was above market, and since the balance sheets which included such valuations were sometimes certified to without qualification by accountants of unquestioned standing, it is obvious that the so-called standard rule may have to be modified whenever there are radical variations between cost and replacement (market) prices. As heretofore stated, the author believes that the rule of "cost or market, whichever is lower," is a good rule and should set the standard for good accounting practice, but the professional auditor is sometimes confronted with conditions which are not normal. What attitude shall he take? The discussion requires the consideration of the following major propositions:

1. When is it proper to value an inventory at less than either cost or market?
2. When is it proper to value an inventory at "cost or market, whichever is lower"?

---

[2] See *Federal Income Tax Procedure*, 1921, page 341. The latest Treasury regulation (January, 1921) is in most respects satisfactory; it recognizes that current quotations are not always reliable, as quantity is a vital element. Article 1584 of Regulations 45 is as follows:

"Under ordinary circumstances, 'market' means the current bid price prevailing at the date of the inventory for the particular merchandise in the volume in which ordinarily purchased . . . . Where no open market quotations are available, the taxpayer must use such evidence of a fair market price at the date or dates nearest the inventory as may be available . . . . Goods in process of manufacture may be valued for purposes of the inventory on the lowest following bases: (1) The replacement or reproduction cost prevailing at the date of inventory; or (2) the proper proportionate part of the actual finished cost; or, under abnormal conditions, (3) the proper proportionate part of the sales price of the finished product, account being taken in all cases of the proportionate part of the total cost of basic elements (materials, labor and burden) represented in such goods in process of manufacture at the stages at which they are found on the date of the inventory."

3. When is it proper to value an inventory at reproduction cost when it is higher than replacement cost?
4. When is it proper to value an inventory at market, market being higher than cost?
5. When is it proper to value an inventory at selling prices?

It will generally be admitted that (2) represents good accounting practice; but no matter how revolutionary it may seem to be, if we find any sound arguments for (4) and if we find that it is being followed, we cannot dismiss it on the ground that it is opposed to good accounting practice. If any rule becomes unworkable and inapplicable, it becomes necessary to evolve and propose a new rule; and if the proposed rule is found to represent the practice of representative and conservative business concerns and of representative and conservative accountants, then the new rule takes the place of the old one and becomes good accounting practice. Under the existing federal revenue law, the Commissioner of Internal Revenue is required to follow "the best accounting practice," consequently there is no good reason for conflict between tax procedure and accounting procedure. As Arthur A. Ballantine has said, "Under the present law income determination is not so much a matter of literal application of specific provisions as a matter of proper accounting."[3]

1. When Is It Proper to Value Inventories at Less Than Either Cost or Market?

Before stating the reasons for what may be termed the understatement of inventory values, let us state the reasons against it:

1. Those in control of a business may desire, for ulterior motives, to understate its net worth and its true earnings in order to deceive minority interests. True, this condition does not arise once in one hundred times, yet it must be guarded against. Therefore, in every case where inventories are valued substantially below cost or apparent market, the balance sheet should

[3] *The Federal Income Tax*, page 163, Columbia University Lectures, 1921.

contain enough information to guide those who may contemplate disposing of their interests.

2. An effort may be made to understate profits in order to reduce taxes or to avoid similar expenses. The reduction in values below cost or market for fraudulent purposes is no more permissible than is any other effort to defraud. It is reasonable and proper that public officers and others who are entitled to audit or supervise business affairs should have available suitable means of passing upon unusual practices. Therefore, in preparing tax or other returns in which the basis of inventory valuations may be an issue, the basis of valuation used should be disclosed. The burden is definitely upon the business concern making the returns to call attention to any unusual treatment of inventories which affects its tax or other liability, because the tax law requires the observance of good accounting practice.

The following are reasons why it is sometimes proper to value an inventory at less than cost or apparent market value:

(a) When market prices and costs of production have increased continuously due to inflation such as that caused by war, the experience of hundreds of years emphasizes the dangers of considering such inflated prices to be normal. In spite of inflation due to wars, prices usually return to pre-war levels, and it is reasonable to assume that they always will. It was said that the recent World War was different from all others, and that therefore prices would continue permanently on a higher level. Yet in 1921 the prices of some important basic commodities were as low or lower than in 1914.

(b) The selection of a low, fixed base price for raw materials is a practice which was adopted many years ago by some of the most successful and far-seeing business men.[4] There must be some direct connection between good business practice and good accounting practice. It is absurd to claim that any successful business or any industry as a whole is subordinate to accounting

---

[4] See page 125.

methods. If business practices are bad and accounting methods are good, the former must yield; but if business practices are good, accounting methods must conform to them. Good business concerns have good cost systems, but when market conditions change it may be folly to expect to realize cost. Good accounting practice must not be confused with good accounting methods. The latter will produce accurate costs by means which are largely mechanical and inflexible. Good accounting practice is based on opinion and therefore is flexible.

Reserves Against Falling Inventory Values.—Some corporation officials thought that the continued rise in prices during the war was a temporary phenomenon, and so took such steps as were necessary to prevent a serious impairment of earning power in the event of a return to lower prices during succeeding years. Thus, the United States Steel Corporation established a reserve during the years 1916 to 1920, which at the close of 1920 amounted to $95,000,000 on an inventory of $353,000,000. This reserve was established to offset the excess of actual cost or market value of inventory stocks over and above the unit prices therefor as at the close of the year 1915. Some corporations carried quantities equal to the war quantities at pre-war cost, and increases in quantities at actual cost.

The "Base" Stock Method.—To be conservative and for convenience some manufacturers have adopted a plan of carrying their basic raw materials through their accounts and in their inventories at fixed or arbitrary prices irrespective of cost. Brass manufacturers frequently have carried copper at 10 cents a pound for many years, during which time copper sold for a considerably higher price. From the point of view of simplicity this custom is like the sales tax—it is very simple in theory but dangerous in practice. If costs were based on fixed-price raw materials, the results would always be inaccurate; balance sheets based on such fixed prices might be conservative, but would be inaccurate and misleading. Some of the concerns which followed this plan also

wrote down their plant valuations to $1. This also was conservative practice but it had no other virtue to recommend it.

During 1921 prices of some commodities declined below any previous quotations. It is probable that base prices would have been fixed on a higher basis. Such conditions, which of course recur from time to time, render the base-price method more or less unreliable. If frequent adjustments are necessary the method should not be used.

On the other hand, the method has much to recommend it. At the beginning of the late war it was believed that the adoption of the base- or fixed-price method would prevent subsequent financial troubles, should prices unduly increase. Many concerns adopted it and those which adhered to it now consider that their judgment has been vindicated. The Treasury Department refused to sanction the practice in so far as the computation of income and profits taxes is concerned. Who is right is a question to be settled by the courts.[5]

In the opinion of the author, the method was adopted by enough concerns to justify calling it good accounting practice.

2. When Is It Proper to Value an Inventory at "Cost or Market, Whichever Is Lower"?

The old rule, "cost or market, whichever is lower," permits in some cases true conditions to be ignored and may inject into the balance sheet a false and misleading element. When cost is lower than value and inventories are priced at cost, the valuable principle of conservatism is followed; but in practically all cases the balance sheet does not show the *value at the date of the balance sheet.* The mere statement that assets are listed at *cost* is no indication of their present *value.* In consequence, all sorts of inferences are drawn and much, if not all, of the virtue of conservatism is lost because of the vicious practice of users of balance sheets in estimating the accrued profit thus concealed. The

[5] For a full discussion of this question, see *Income Tax Procedure*, 1921, page 350.

imagination sets no limits to such estimates. Surely it is better to set up some expression of value *at the date of the balance sheet* than to employ "cost" without a full exposition of the relation of cost to value.

The substitution of "market" for "cost" because market is lower than cost, is a more satisfactory procedure than continuing at cost when cost is far below market, and marks the approach to a more scientific and accurate statement. At the present time, however, the term "market" is not uniformly defined.

A definition promulgated by the Treasury early in 1921[6] is almost ideal: "Under ordinary circumstances 'market' means the current bid price prevailing at the date of the inventory for the particular merchandise in the volume in which ordinarily purchased by the taxpayer." This is a definition which will be approved by the courts in litigated cases. It is satisfactory to business men and credit grantors. Very few balance sheets, however, have adopted the principle and most income tax examiners ignore it. The principle is followed in theory, but in practice the most vital and controlling element in the definition, viz., "in the volume in which ordinarily purchased," is repudiated. The published quotation for crude rubber on December 31, 1920, was 20 cents a pound. The cost of production was then and still is more than 20 cents per pound. At December 31, 1920, what was the proper method of valuing crude rubber which cost 30 cents per pound to produce and which had cost 40 cents per pound? The current bid price was 20 cents per pound; but current bid prices almost invariably ignore quantities or volume. In a seller's market large purchases result in an advance in the bid prices; in a buyer's market large sales result in a decrease in the bid prices. *Those who intelligently analyze balance sheets* are interested in large quantities and in the influence of large quantities on the market. Fluctuations affect small concerns and large concerns alike,

[6] See Article 1584 as revised, Regulations 45 (page 122 hereof). The article before revision was unsound. For discussion of changes see *Income Tax Procedure*, 1921, pages 346 and 358, and previous editions.

except when a small concern fills its requirements or sells its products in a market not participated in by the larger concerns in the same industry. These cases are rare because large concerns do not stay out of the market very long and small concerns cannot, as a rule, choose their own times to trade. Under such conditions professional auditors should not feel bound by any inflexible rule. The basis to be used should be decided upon after full consideration of special circumstances. A clear statement of the basis decided upon in good faith represents good accounting practice. General rules are not intended to govern exceptional cases.

Steel prices were fixed by the government during the war and up to December 31, 1918. At the end of the period of governmental price-fixing, steel manufacturers reduced prices somewhat but the revised quotations were productive of very little business. In March, 1919, further reductions were made. There are available trustworthy "market" quotations as of December 31, 1918, but such quotations are grossly misleading because they were purely nominal. The business done at those quotations was negligible. All attempts to sell considerable quantities at the "asked" prices met with failure. Prospective buyers ignored the published "bid" prices and waited for lower prices. The early reductions in the "asked" prices proved beyond question that purchasers would not pay the former "asked" prices, thus showing the danger of using published quotations unless the *volume* of business done at such quotations is known. For balance sheet purposes as at December 31, 1918, "the current bid prices (for steel) prevailing at the date of the inventory" were not the published quotations but were substantially lower prices because no considerable quantity of steel was sold between January and March, 1919.[7]

It is true that in periods of depression some goods cannot be sold at any fair price. It would be idle to take bid prices under

[7] The author was a member of the governmental price-fixing committee and participated in the conferences before and after January, 1919; therefore he speaks from personal knowledge of the facts.

such conditions as criteria, because the sellers usually can afford to carry unsalable stocks better than those who do not wish to buy, and usually can afford to carry stocks just as well as those who would pay "junk" prices and carry the stocks as a speculation. The usual free credit which would be extended to those who might be expected to buy for future needs is contracted almost to the vanishing point.

During the year 1920 radical fluctuations occurred in the prices and values of most commodities. At the beginning of 1920 many inventories were taken at "cost," which was supposed to be less than "market." At the end of 1920 many inventories were taken at "market" which was supposed to be less than "cost." The conditions were ideal for testing the old rule; it was intended to be inflexible and it alone was held to represent good accounting practice; but widely different interpretations were placed upon the words "cost" and "market." If the matter had been left to professional auditors they would have ruled that at the end of 1919 "cost" should have been interpreted to mean normal or reasonable cost, not temporary costs resulting from inflated prices of material and labor; and at the end of 1920 they would have interpreted "market" to mean realizable values. The nominal quotations which existed could not have been and were not realized in most cases. Bankers were keen to know that the rule of cost or market was observed, but due to a lack of general understanding as to the meaning of the word "market" many misunderstandings occurred. The term "normal costs" can hardly be used unless costs are fairly uniform over a period of not less than three years. Therefore, in a rapidly rising market accountants would have persuaded their clients to value inventories below the temporary costs. The United States Steel Corporation did adopt this method. The mere creation of contingency reserves is not good accounting practice. Every intelligent user of a balance sheet knows that the entire surplus is a contingency reserve. It is good accounting practice to set up specific reserves and to segregate surplus for certain purposes, but it is

not good accounting practice to inflate assets and then carry general reserves against such assets.

When available information demands the writing down of current assets, they should be written down against current income. When such information is not available and only a suspicion to that effect exists, it is not good practice to write down the assets or to set up reserves against them, because contingency reserves are not charged against current income; therefore, if such reserves are used in the following fiscal period, there is no charge against income in either period. In other words, current operating losses are in effect charged directly to surplus. It is highly desirable to explain any extraordinary items in a current income account, but there is no excuse for leaving them out solely because they are extraordinary.

At the beginning of 1920 most inventories were carried at prices far in excess of the values which were later realized. It is contended by some that the practice at that time was justified, (a) because current costs were not going down, but were increasing, and (b) because orders greatly exceeding entire existing inventories were in hand or in sight. The fallacy of this contention was demonstrated early in the year 1920. So-called firm orders amounting to hundreds of millions of dollars were canceled. So-called market prices melted like snow on a hot day. In many cases declines exceeded the entire profits for the year 1919. In some cases the actual values of inventories were known before tax returns for 1919 were made up; yet the fear heretofore referred to was so great that imaginary market values were placed upon December 31, 1919, inventories, and excessive taxes were paid upon such valuations. Professional auditors are not supposed to be prophets but many of them went on record that apparent market prices at that time were not actual market prices. The author prophesies that, when the United States courts commence to pass upon the fair market value of December 31, 1919, inventories, some of the fallacies of existing definitions will be exposed.

At the end of 1920 the situation was reversed. The apparent "market" value of many commodities was lower than replacement costs, and in some cases it was below any possible future replacement costs. The term "market," as defined for inventory purposes, was restricted to the nominal bid quotations at that time. At the beginning of 1920 there were no willing sellers; the buyers were in a panic. At the end of 1920 there were no willing buyers; the sellers were in a panic. The courts have defined "market value" to be the price at which a seller, willing to sell at a fair price, and a buyer willing to buy at a fair price, both having reasonable knowledge of the facts, will trade.[8]

The rule, "cost or market, whichever is lower," was adopted to encourage safe and sound business practice, and at the end of 1919 should have been interpreted: "market prices" means "realizable" market prices.

THE RULE SHOULD BE MORE FLEXIBLE TO COVER ALL CONDITIONS.—When literally interpreted, the rule of "cost or market, whichever is lower" fails not because of the intention back of it, but because the intention cannot be expressed in a few words. It is always desirable to have rules as short as possible, but it is better to have them long and clear than short and obscure. Experience has shown that "cost" and "market" are words of widely different application and meaning. Since the original intention of the rule was clear to the accountants who worked it out, the intention should have been set forth as a part of the rule. The author does not propose an entirely new rule but believes that good accounting procedure can be accurately reflected through reasonable interpretation.

---

[8] "In the matter of *Cliquot's Champagne*, Judge Hoffman defined the market value of goods to be 'the price at which the owner of the goods, or the producer, holds them for sale; the price at which they are freely offered in the market to all the world; such prices as dealers in the goods are willing to receive, and purchasers are made to pay, when the goods are bought and sold in the ordinary course of trade'; and the definition was approved by this court. *Cliquot's Champagne*, 3 Wall 114, 125, 142. We regard it as quite sufficient for the inquiry here . . . ." (*Muser v. Magone*, 155 U. S. 240. October term, 1894.)

VARIATIONS IN BALANCE SHEET VALUATIONS OF INVENTORIES. —The author has analyzed more than one hundred balance sheets of well-known corporations, as of December 31, 1920, and as of the close of fiscal periods ending several months before and after that date, in order to ascertain the prevailing method of valuing inventories. Nearly all of these balance sheets were certified by reputable auditors; and any method adopted by the majority of these auditors may be considered good accounting practice. It is not customary to state the method of valuation on the face of balance sheets, but in many cases the auditor's certificate or the president's report specifically states that the inventory is valued at cost or market, whichever was lower; in many cases the statement is made that market values were far below cost, and in some cases the amount required to write down cost to market was mentioned. In a few cases provision was made to write purchase commitments down to market.

In several cases inventories were carried at cost. Criticism must have been anticipated, because explanations were made in defense of the basis of valuation used. In one case it was stated that the inventories were to be applied to specific sales orders.

In another case the statement was made that new products were valued at "sales prices, net"; the obvious meaning being that the new products were costing more than they were selling for.

As commented on elsewhere,[9] some inventories of goods which contained a profit were carried at sales prices. It was not always so stated, but it may be assumed that in all cases the sales prices were net of delivery and similar charges.

In some cases when inventories were written down to market, the prices were no greater than those prevailing at the commencement of the war. In those industries where prices at the end of 1920 were still substantially above pre-war prices, only one case[10]

---

[9] See page 148.

[10] The United States Steel Corporation. See annual report for 1920, pages 32 and 33, and comment thereon, page 16 thereof.

was found where it was made plain that a reserve was carried to reduce the inventory to pre-war prices.

One corporation[11] valued crude rubber at a price well above market price; the unit price was given but, as the quantity was not shown, it was impossible to determine from the annual report the amount involved.

The certificates to most of the best balance sheets indicate that the auditors made critical investigations of the inventory items. In some cases qualifications appear, usually stating that quantities were vouched for by responsible officers, but usually the auditors certify to the accuracy of the inventories. This is as it should be. In the second edition of this book,[12] the author stated that stock-taking was the most important element in business, and that bankers, stockholders, and others were not satisfied with the reluctance of many auditors to avoid verifying inventories. As the demand increased, auditors devoted more attention to the subject, so that today most reputable auditors are fully able to pass upon every element of inventories.

There are many cases when auditors do not accept responsibility for quantities and so state in their certificates. It is good accounting practice to certify with the reservation; but when it is feasible, the certificate without the reservation is more acceptable. As stated in other chapters, it is possible to certify to the accuracy of work done by others without verifying every item or transaction.[13]

Evolution of Rules of Valuation.—At one time it was the practice to take inventories at cost, market, or net selling prices, depending on the attitude of the owners of the concerns affected. There was no uniformity in method and arbitrary changes were made to meet temporary conditions. Professional auditors were responsible for the subsequent standardization of methods. The underlying purpose of standardization was con-

[11] See page 143.
[12] Pages 86 and 87.
[13] See page 430.

servatism, not the scientific determination of results for a particular period. Values in a true sense were often ignored in stating results, in order that the term "profits" might be limited to realized profits rather than to accrued profits. This theory has been carried to an unnecessary extreme, but as an expedient to prevent anticipation of profits it has worked exceedingly well.

The rule evolved was that inventories of goods, materials, securities, and all other current assets should be valued at the actual cost thereof unless, due to a decline in values, the market or replacement price was lower than cost; in all cases the lower of the two was to be used. Cost was construed to exclude interest on the investment and selling and administrative expenses; market was intended to mean replacement cost of such part of the inventory as would normally be replaced. Overstocks, obsolete goods, and other undesirable stocks were supposed to be marked down to actual values. When market prices were above cost it was recognized that, on the same principle or basis of actual values, the inventory should be written up; but expediency and conservatism prevented any reflection of the unrealized increases in values except as a footnote to a balance sheet or comment in an audit certificate.

Tendency of Valuations Before 1917.—In a few industries where costs were difficult to determine, inventories were taken at net selling prices, but such exceptions were rare. Prior to 1917 there was a tendency to overvalue inventories and auditors had a fairly hard time enforcing the rule. Commencing with the end of 1917, due to the influence of the income and excess profits taxes, there was a tendency to undervalue inventories; consequently, the auditor who formerly preached the gospel of conservatism found himself arguing with his client against a material undervaluation of his inventory.

Meaning of Term "Inventory at Cost."—The term "cost of product" may have but little connection with the term "inventory valued at cost" in a balance sheet. Merchants and

manufacturers are vitally interested in ascertaining total costs of production. Competition may fix selling prices, it may be feasible to add a fixed percentage to cost, or the demand may be so great that sales prices have little relation to cost; but, whatever sales prices may be, it is important to have trustworthy information regarding costs. An inventory "at cost" may be based upon a cost system which is satisfactory to the owners or managers of a business, but it may be necessary to adjust the valuations in order that bankers and creditors will not be deceived.

In the Federal Reserve Board's proposal for uniform accounting, 27 points are mentioned regarding inventories. Point 17 (a) is: "That no selling expenses, interest charges, or administrative expenses are included in the factory overhead cost." Point 27 is: "It may be well to reiterate that interest, selling expenses, and administrative expenses form no part of the cost of production, and therefore should not be included in the inventory in any shape."[14]

Determination of Average Costs.—The foregoing rule should be insisted upon; moreover, care must be used to eliminate from inventories "at cost" any other items which good accounting practice requires to be eliminated. Good accounting practice is not inflexible; generally speaking, it requires that, if at the end of a fiscal period inventories are to be valued at cost, all items must be excluded from inventory valuations except factory costs, and that no doubtful items may be included. When the costs of

[14] "The term 'Cost' means: (1) Cost of material and supplies. (2) Cost of direct labor. (3) A fair proportion of overhead expenses. By the term 'overhead expenses' is meant the indirect labor and other manufacturing expenses, and the general and administrative expenses applicable to and necessary in connection with the production of the articles contracted for . . . . It does not include (among other items) the following: Interest, rent, advertising, collection expenses, credit losses and customers' discounts, and such taxes as income and excess profits taxes imposed by the United States Government." (Uniform Contracts and Cost Accounting Definitions and Methods, U. S. Government Interdepartmental Conference, 1917, page 7.)

"Standard methods of distribution of overhead are first, direct labor cost; second, direct labor hours; third, machine hours.

". . . . The method of distribution of overhead by the direct labor hours is, in the majority of cases, the most accurate method." (*Ibid.*, page 12.)

materials are averaged over a period of time, it becomes necessary to analyze the most recent costs and purchases. If costs are rising, average cost prices will be somewhat lower than the most recent costs, so that it should then be noted that the inventory is priced "at cost or less." If prices are falling, average cost prices will be in excess of current replacement costs (market) so that the inventory valuations must be reduced.

If the client declines to change the inventory valuations, and if the auditor is asked to certify that the inventory is valued at cost, the question arises, "What will be understood by the word 'cost'?" One concern may have started with large quantities of raw materials at high prices and the average cost may be very high; another concern manufacturing the same kind of product may have much lower average costs. Their inventories may contain the same number of units representing a considerable difference in aggregate costs. Those who extend credit to such concerns may easily be misled by the use of the word "cost"; therefore an auditor, when certifying to a balance sheet in which inventories appear at cost, should endeavor to have the balance sheet contain a full disclosure of base prices used or other data which will enable those who use the balance sheet to compute the difference between the cost prices used and replacement cost.

Reductions in labor costs and in costs of manufacture due to use of improved machinery or processes, may become effective immediately before the date of a balance sheet. In reducing inventories to market value (where market value and replacement costs are assumed to be the same), such decreasing costs are as important a factor as decreases in the cost of raw materials. When selling values decline and costs decline, the downward trend cannot be attributed solely to lower replacement costs of materials rather than to lower labor or other costs.

In the following discussion questions of deterioration, changes in style, fluctuation in prices, etc., are ignored. These questions are fully dealt with elsewhere.

Dealing with purchased goods or materials:

1. *Specific Purchases on Hand.* When only specific purchases are on hand at date of inventory, the purchase price as shown by the latest invoices is to be used except when the stock on hand is allocated to fill a particular order and a previous purchase to fill such order was used on another order. A concern received two contracts each requiring 1,000 tons of pig iron. When contract A was taken, iron was ordered at cost $25 per ton and the contract was based on $25 iron. When contract B was taken iron at $30 per ton was ordered. Contract B was completed first but the $25 iron was first received and consumed. At the end of the period contract A was not completed and there were on hand 1,000 tons of iron (purchased against contract B) which cost $30 per ton. If the iron were inventoried at $30,000, it would result in contract B (completed) showing a profit of $5,000 more than was anticipated and in the next period contract A would be completed with a profit of $5,000 less than was expected. With the probability of different persons being interested in the results of the two periods, it would obviously be improper to distort the accounts of back periods merely to follow an old rule that the last price of recent purchases is the invoice price. The actual situation is that lot B takes the place of and replaces lot A, that lot A is in effect on hand, and the true cost of the iron in the inventory is $25 per ton. If the situation were reversed it would be proper to inventory iron which cost $25 per ton at $30 per ton, provided the incompleted contract were in every way a good asset.

2. *Different Lots at Different Prices.* When different lots have been purchased at different prices, the strictly accurate cost of the quantity of a specific article in the inventory is that paid for the latest quantities, working back through the invoices and taking the sum of invoices representing the aggregate quantity in the inventory. But this method is not feasible in practice, because old purchases at old prices must be disposed of. Whenever there is a mingling, or a possible mingling, of goods or materials, the cost prices also are mingled. It is quite easy to reason otherwise but the line of reasoning is fallacious. For bookkeep-

ing purposes it is possible to show that various lots are consumed at different times. By a little juggling it can be shown that out of four lots of the same kind of materials costing different prices, any one lot is entirely used before any other, and at inventory time the "cost" of the quantity remaining (consisting of only one lot) may be that of any one of the lots. In fact, if the goods are the same, consumption is sure to follow the line of least resistance, or, in other words, those lots will be used first which are most conveniently situated. We must remember that we are dealing with goods which are not used up as purchased but that new lots are received before the old ones are disposed of.

During a given period we deal with the cost—not the value—of what we buy. The *value* of what remains at the end of the period is fixed by the market at the same time. The *cost* of what is on hand is an average cost.

When monthly costs are determined, the purchases (quantities and costs) during each month are added to the balances brought forward at the beginning of the month, and an average cost is determined by dividing the total quantity into the total money figures. This method is better than merely taking an arithmetical average of invoice prices. Unless an average is "weighted"[15] it is erroneous.

Vagueness of the Term "Cost."—We usually refer to "cost" as if it were an exact term and not to be compared with the elusive word "market." Experienced accountants often find it difficult to determine costs, even when all factors are known; when some factors are not known it is impossible to determine accurate costs, and so estimates must be substituted. Even when a specific purchase of goods is on hand at the date of an in-

[15] A "weighted" average is one computed by giving due weight or consideration to all of the elements which enter into the calculation. When 100 shares of stock sell for $80 a share, and 1,000 shares sell for $70 a share, it may be said that the average sales price is $75 a share. But if the sales were made by the same person, he would deny that the average price was $75. He would say that the average price was about $71 per share and prove it by showing a cheque for $78,000, the proceeds of the sale of his 1,100 shares.

ventory, it may be inaccurate to include such purchase in the inventory at its cost.[16] When different purchases are made at different prices and when all raw materials fluctuate in price, the difficulties of arriving at accurate cost prices are very great.

These difficulties can be overcome under a good accounting system; but it is nevertheless important that uniform methods be followed or else comparisons of the financial statements of one concern with those of another will be misleading. There is no good reason why the words "inventory at cost" should mean one thing in one balance sheet and another thing in some other balance sheet. If we state and discuss the problems it may be possible to agree on uniform practice. Inventories are usually divided into four groups, viz.:

1. Raw materials or goods purchased, on hand and in the same condition as when purchased.
2. Goods in process of conversion or manufacture.
3. Manufactured or converted goods.
4. All other materials and supplies.

The four groups mentioned are discussed in detail in Chapter IX. There are several points in the determination of cost which must be understood before applying the term "cost" to an inventory as a whole.

Arbitrary Methods of Finding "Cost."—To arrive at cost, arbitrary methods must sometimes be used. The proceeds of the sales of by-products are usually applied against the cost of production of the main product without regard to the cost of producing the by-products. In the anthracite coal industry the so-called "small" sizes are sold for less than cost of production because of competition with bituminous coal. The value of gold is deducted from the cost of mining copper or silver or lead. In some other industries in which products of more than one grade

[16] See page 141 for illustration.

are obtained by a common operation, the cost of any one product is more or less arbitrary. In the packing industry by-products such as hides, wool, and lard are credited at market or selling prices against the cost of fresh carcass meats. In the packing, as in the oil, industry one unit of raw material is broken up into many products, instead of many raw materials being brought together into one unit of finished product.

Under such diverse conditions it is regarded as good accounting practice to assign higher costs to more valuable products and lower costs to less valuable products, even though the apparent cost of production of each grade is the same. This is practically the same as working back from the selling prices. Whatever objection may be made to this rough and ready method, it is less likely to deceive than many elaborate cost systems. It is well to reiterate that good business practices and good accounting practices must go hand in hand.

Can Appreciation Be Included in Costs?—It is inconsistent to argue that the word "cost," in its common meaning, should include any element of appreciation or unearned increment. A steel company may be mining certain ore for which it pays a royalty of 25 cents per ton, and it may be mining inferior ore for which it pays a royalty of 50 cents per ton. It may also be purchasing ore in the market at a price which is equivalent to the payment of $1 per ton royalty. Strictly speaking, "cost" includes the actual cash outlay irrespective of appreciation or bargain purchases. Unless a balance sheet or audit certificate states otherwise, it is to be presumed that the word "cost" excludes all appreciation.

In view of many revaluations as at March 1, 1913 (when a separation into capital and income became of more importance than accounting rules based on expediency), there is no impropriety in using values (instead of cost) of that date in computing costs. When market values are above cost and the revaluation basis has been used in arriving at cost, mention should be made

thereof either on the face of the balance sheet or in the audit certificate.

When a balance sheet is being prepared to be used as the basis for the sale of a business, actual values should be shown irrespective of cost. The basis of valuation should be shown on the balance sheet accompanied by a notation pointing out the variation from the usual method hitherto followed in that concern.

3. When Is It Proper to Value an Inventory at Reproduction Cost, It Being Higher Than Replacement Cost?

If balance sheets are intended to reflect true values, unsound theories of balance sheet construction must be abandoned. "Value" and "cost" are rarely the same. Ordinarily, a thing is worth something more or less than it cost, assuming always that those who prepare and those who read balance sheets have the same conception of cost; usually, of course, they do not. Even when there is agreement as to the meaning of the word "cost," it usually happens that at the date of a balance sheet the cost of replacement is either more or less than the actual cost of the goods in the inventory. Reproduction cost at the date of an inventory is not a good criterion of *value*, because in an advancing market the value of finished product is higher than reproduction cost, whereas in a declining market the sales value of finished product is frequently far below reproduction cost.

This has no bearing on the importance of knowing accurate costs. It is of the greatest importance to know whether it costs $1 or $2 to produce a given unit; but if there are 1,000 units on hand at inventory time, true balance sheet values do not require that the quantity still on hand must be valued at $1,000 or at $2,000 merely because that was the cost or the average cost when the units were produced. The cost to a competitor may have been $1,500; the replacement cost may be $1,200; the apparent market value may be $1,400. What is required today is independent, impartial, and fearless judgment applied to the quan-

tity on hand at the date of the balance sheet and an estimate of the *value* of the quantity expressed on the balance sheet.

Cost records have their place—a very important place—but in balance sheet construction it is a subordinate place.

The term "market price" should be used synonymously with "replacement price" whenever inventory valuations of finished goods are under consideration. Market price means the price at which one can buy; sales price means the price at which one can sell. In determining market values, inquiries are made to ascertain the prices at which goods can be bought, which presumably is less than the prices at which they can be resold. It should be possible to manufacture goods at lower prices than they can be purchased for from others; but such is not always the case. In times of depression concerns frequently buy goods at less than cost of reproduction; in times of inflation they pay more than cost of reproduction. Replacement cost may be more or less than market price when a concern does its own manufacturing or converting; but when a concern buys to resell in the same form, the replacement cost is the same as the market price.

In the case of manufacturers, when replacement cost is less than the actual or original cost of the goods in the inventory, the inventory should be reduced to replacement cost. When reproduction cost is more than apparent market or replacement prices, it might appear, and it is urged, that there is some justification for valuing the inventory at reproduction cost when it is believed that market prices are unduly depressed, that considerable quantities cannot be purchased at the apparent market prices, and that the inexorable law of supply and demand will in time raise the market prices to something above cost of reproduction.

In considering the factors involved it must be borne in mind that one reason why the market price is low is because there are some who believe that reproduction costs will decrease.

In the annual report of a large rubber concern for the year ended December 31, 1920, appears this reference to the inventory of crude rubber:

The year 1920 opened with crude rubber (first latex crepe) at 55 cents a pound and closed below 20 cents a pound. Your company carried over about seven months' supply of crude on hand and to arrive at 26.79 cents, which is below the average cost of production, and with the revival of business the price of crude rubber is certain to advance.

The valuation was probably determined by the inference that sellers, on the basis of replacement costs, would refuse to sell any considerable quantity at less than the cost of production. In the corporation's semiannual report for the six months ended June, 30, 1921, the following statement was made:

In ascertaining the results for the first six months of 1921, the cost of goods sold was computed on the basis of the cost of the goods carried in inventory as of the first of the year, plus the cost of the goods manufactured during the period, thus absorbing in cost any depreciation that may have occurred in inventory after the first of the year and also the higher cost of goods manufactured during the period. The cost of finished goods carried over as of the first of the year was conservative on the basis of the selling prices then prevailing, which prices it was believed would be maintained for the period of time necessary to effect the liquidation of stocks. Instead, however, it was found necessary to substantially reduce selling prices for some classes of merchandise, especially tires and mechanical goods. The effect of these price reductions was necessarily reflected in the results of sales for the first six months of this year, in addition to which there were reflected in the net results for the period the burdens of the higher cost of goods sold, as shown above.

It is obvious from the foregoing that it would have been better on December 31, 1920, to have valued the crude rubber at market instead of at reproduction cost.

The general rule may be stated to be that on a declining market, inventories should be valued at market or replacement prices or less, even though such prices are below the current cost of reproduction.

There may be exceptions when the market is unduly depressed and when the cost of reproduction obviously has reached bottom or nearly bottom. The auditor in such cases is justified in cer-

tifying to values on any reasonable basis when the balance sheets show the basis used.

4. When Is It Proper to Value an Inventory at Market, Market Being Higher than Cost?

Conservatism and expediency are to be commended at all times, and are useful offsets to the tendency of business men to fool themselves—to overstate assets and profits and to understate liabilities and losses. But there should be no secrecy about conservatism and expediency. If book profits seem to be unreal, expediency may appear to justify the writing down of asset values arbitrarily or the setting up of large reserves, in which case the balance sheets should exhibit a truthful picture of what has been done. If there is no intention to write down values arbitrarily, and if balance sheets purport to exhibit the actual values, as nearly as can be determined, of all assets shown therein, it is obvious that the rule of "cost or market, whichever is lower" renders impossible a true and accurate balance sheet whenever market values substantially exceed cost. It is possible to be conservative and at the same time prepare a balance sheet which will disclose—not hide—favorable changes in market values.

Value, Not Cost, Is the Inventory Criterion.—It is not always possible to secure trustworthy market quotations for all or some part of an inventory, in which case the cost of the various items is of great importance. When trustworthy market quotations can be secured the question of cost is subordinated. When the market is substantially higher than cost, errors in computing cost cannot do any great harm. When the market is lower than cost, the substitution of market values for cost prices requires an adjustment of the income account, but errors in computing costs are automatically corrected in the adjustment.

The important question of actual value includes much more than an inquiry into market *unit* prices. In securing market quotations it is customary to place entirely too much reliance on

quotations for apparently the same goods or materials as those in the inventory. This erroneous practice extends to basic materials as well as to less salable commodities. There may be a nominal quotation of 13 cents a pound for copper, but, if one concern has 100,000,000 pounds of it and another concern has 100,000 pounds, the quotation does not apply with the same weight to each. The concern with 50 tons may dispose of it at 13 cents, but on a dull market the concern with 50,000 tons could not possibly dispose of it at 13 cents.

This principle must be carried to inventories as a whole. For instance, there must be some reasonable relation between the four groups into which inventories are usually divided. The quantity of raw materials may be excessive or insufficient when compared with the goods in process. The length of time it requires to convert raw materials into finished product and the manufacturing capacity of the concerns which own the materials are always important factors. The relation of the goods in process to raw materials is of about equal importance to the relation of goods in process to finished goods. There may be an overstock of the latter which will be increased as the goods in process are completed. The question of an overstock depends on the possible outlet for the product. The turnover of previous periods is usually a good criterion, but only under normal conditions. Likewise, the stock of supplies may be out of proportion to the other groups.

Thus it is seen that unit cost figures and unit market quotations are only two out of at least twenty factors which must be considered in arriving at inventory valuations for balance sheet purposes.

It has been stated that "logically considered, books of account should be kept so as to reflect cost and not value and this is the theory at the base of accounting structure."[17] The author believes that the foregoing statement is inaccurate; its application leads to self-deception and to the deception of others. The state-

[17] *Journal of Accountancy*, July, 1921 (editorial), page 50.

ment should read: "Books of account should be kept so as to record original cost; at regular intervals, and always when balance sheets are prepared, costs, if prices have changed, should be adjusted to reflect value." Adjustments of fixed assets should ignore mere fluctuations and be limited to depreciation, depletion, and obsolescence, except in cases of changes in ownership and for similar reasons; adjustments of current assets should reflect fluctuations up and down in order that existing values be reflected in all balance sheets and similar statements.

There is no general rule which sanctions the marking up of inventories to market prices. When an auditor desires to have a balance sheet reflect market prices, and market prices exceed cost, it should be looked upon as exceptional. Preferably the special reason for such action should appear in the auditor's certificate and the amount of the write up should be separately stated as part of the inventory item as well as a separate item in surplus.

American Malting Case.—In this case[18] the court held that a director of the corporation was liable in money damages arising from his negligence in permitting the writing up of values, anticipating profits on unfilled contracts, and paying out in dividends such prospective profits. The profits were estimated on deliveries to be made far in advance. In one sense of the word they were not speculative because the product was sold under contract; but in no sense of the word were the profits realized at the date dividends were declared. The court said: "These contracts were to deliver at a future time a product not yet made from raw material not yet purchased, with the aid of labor not yet expended." Under such circumstances, there was no justification for setting up any profit, contingent or realizable, on the books.

The court, however, drew a sharp distinction between prospective profits and what appeared to have been a definitely as-

[18] *Hutchinson v. Curtiss*, 92 N. Y. S. 70 (1904); 45 Misc. Rep. 484.

certainable increment in value at the date of preparing the statements upon which the dividends were based.

The court said:

> Barley is bought by the bushel of forty-eight pounds. Malt, the manufactured article made from barley by steeping, is dealt in by the bushel of thirty-four pounds. The process of manufacture produces about fifteen per cent more of malt by the bushel than the barley measures from which it is produced. The amount of this fifteen per cent excess is reported from each of the manufactories month by month as increase. Of course, this increase has a value, as it is sold as malt at malt prices. For the purpose of inventory the company has ascribed to it the value of the barley. This, plaintiff's claim, is error, because that amount has already once been charged to malt account, and they say this increase should have no value ascribed to it until sold and delivered, when its proceeds go into the books as cash. But it certainly is an asset of the company, and as an asset at inventory periods, or when it is necessary to ascertain the actual condition of the company, it must be valued in some way. As it has always been the custom in the malting business to treat it as treated by this company, I am unwilling to disregard that custom.

The court evidently took the position that a correct balance sheet is one which takes into account values accrued (increment) to the date of a financial statement; but which eliminates any apparent or prospective profit to be thereafter realized from the delivery of the product at prices in excess of the replacement (market) value at the date of the balance sheet.

5. When Is It Proper to Value an Inventory at Selling Prices?

It is customary to condemn unreservedly the practice of inventorying goods or commodities at selling prices. Certainly it is a radical departure from "cost or market, whichever is lower." So the question arises, "Can it ever be good accounting practice?" If we define good accounting practice to be that which is followed by good accountants, we find many precedents for valuing inventories at selling prices. We find balance sheets of well-managed and prosperous concerns certified to by leading accountants, in which the statement appears that inventories are valued

at selling prices. Under the circumstances we are forced to the conclusion that it may be good accounting practice.

Perhaps the test always lies in full disclosure. The author contends that in every case when inventory items are carried on a balance sheet without explanatory comment, those who use the balance sheet are justified in assuming that no profit whatever appears in the item, and that, if there has been a decline in values, the decline has been fully reflected. But if the inventory is clearly shown to be at selling prices, the chief cause for criticism has been removed. There may be anticipation of profits but there is no deception. If there is a good reason for this basis of value, the other objections are likewise removed. It may be that those responsible for the operations of the concerns and those who certify to the accounts are convinced that a true statement for a specified period can be shown only by recording as completed those transactions which, according to the best information at the date of the balance sheet, were completed.

The following examples have been noted wherein inventories have been stated to be at selling prices when such prices have been in excess of cost:

Mining Companies—gold, silver, copper, lead, and other metals.
Packing Companies—fresh meats and other products.
Oil Companies—crude oil and refined products.
Sugar Companies—sugar and molasses.

In some cases, but not all, firm orders were in hand for the entire inventory priced at selling values.

It has not always so appeared, but it is believed that in all cases the items were net of selling and delivery expenses and charges. It has been pointed out that in many cases loans are made on commodities at prices in excess of cost and that it would be improper to show a liability on one side of a balance sheet greater than the book value of the specific commodity on which the loans were based.

The author does not know of any authority which contends that profits accrued only upon realization *in cash* of the proceeds of sales. Under existing general practice the conversion of merchandise into accounts receivable marks the point when profits may be taken. When we analyze this practice we find that it is conservative but not logical. If we are simply trying to establish standards which rest solely on conservatism, we do not go far enough in establishing reserves for doubtful accounts.

A mining company may sell copper to B on December 1, 1920. B is reported, prior to December 31, to be a poor risk, so a reserve is set up to provide for the prospective loss. The Treasury says: "You have realized a taxable profit but you have not realized a loss; you must pay a tax on the profit." On December 31 the company had on hand copper sold, but not shipped, to the Standard Oil Company. If it inventoried the copper at selling price the Treasury would say: "You have not realized the profit and you should not report the profit." The facts of the case are that from a common-sense business point of view the sale to B resulted in a loss and the sale to the Standard Oil Company resulted in a profit *prior to December 31*. In many cases accounts receivable are never converted into cash even though they appear to be good,[19] and in countless cases collections are spread over a period of six months or a year.

Why should good accounting practice blindly accept delivery of goods and transfer of title as equivalent to realization, and refuse to sanction as good accounting practice the taking up of profits on orders which will be converted into cash long before many of the accounts receivable will be collected? If the only defense is expediency and conservatism, the author agrees that the defense is good and almost sufficient. If the answer is that the practice is logical or that it truly exhibits actual results for a specific period, the author contends that it is not logical and that it obscures actual results. It may be that few concerns can qualify under the strict requirements which the policy of inventorying

[19] See page 91.

at sales price contemplates, viz., basic commodities for which there is a continuous demand; complete publicity; uniformity over a period of years; unquestioned recognition of their obligations by customers or vendees (industries in which cancellations occur are barred as a matter of course).

The truth of the matter is that thousands of concerns which have prided themselves on not anticipating profits have habitually been guilty of far less conservative practice in overvaluing the unsold portions of inventories. As stated elsewhere, the results of the last few years have demonstrated that the word "market" is grossly deceptive. It would be far better to value sold goods at sales prices and unsold goods at far less than cost or so-called market, than to price entire inventories at inflated values, and thus in effect fail to anticipate losses.

The author has reached the conclusion that good accounting practice permits inventories represented by firm orders from solvent and honorable payers, verified by actual experience (at least in part) after the date of the balance sheet, to be priced at net sales prices, when no one is deceived and when good business judgment sanctions the practice as exhibiting the true results of operations for a specified period, always assuming that the accounts are so stated that the exact facts are clear to all who use the balance sheets; that the practice is optional, and that it is designed only to reflect "true financial conditions." When all of these conditions are observed, the rule, "cost or market, whichever is lower," has no relevancy.

The foregoing rule, however, is effective only when all parts of inventories not valued at sales prices are ruthlessly reduced to actual market prices if not worth cost, and when "market" is construed to mean the prices at which one would willingly buy equal quantities of exactly similar goods.

Prices After Closing Date

The fundamental error in the rule of "cost or market, whichever is lower," is the distinction made between inventory values

and accounts receivable. Any appreciation in the value of unsold goods, no matter how permanent and no matter how near to actual realization, is ignored on the balance sheet; yet the instant an account receivable is created the full profit is taken. The old rule should be most effective in a period of inflation, but that is when it is least effective. During 1920 the quantity and value of returned goods were very large, thus indicating that accounts receivable may be of no more actual value than orders and contracts.

The author is not attacking the rule from its conservative side but calls attention to its unscientific features. The balance sheet which reflects permanent appreciation in the value of current assets is more accurate than the balance sheet which fails to make provision for goods which may be returned. The answer usually made in the latter case is that, since a balance sheet frequently is not certified to until several months after the closing date, the value of the accounts receivable as of a past date can be checked on the basis of collections or returns during the interval. True, but it is even more true of stocks of goods on hand at the closing date. Under the rule such subsequent fluctuations are largely or wholly ignored. Is it not better to take cognizance of transactions which occur subsequent to the closing date? When orders in hand are filled and the profit is realized, why not show at least part of the profit in the period during which the orders were taken and the goods purchased or manufactured? The profit should not be merged with realized profit, but should show in a separate item in the surplus account, and as a separate item in the balance sheet. The proper objections to anticipating a profit are thus obviated. If there is a decline in market prices subsequent to the closing date, why not assume that the causes of the decline had their inception in the period prior to the closing date, and accordingly write down the inventory to lower values than the nominal quotations as at the date of closing appear to justify? And if there is a rise in market prices after the closing date, why not assume that the causes of the rise had their inception prior to the closing date and therefore carry the inventories

at, let us say, cost of production even though the nominal market quotations were lower than cost? Why proceed as if there were something sacred in the purely temporary conditions which frequently exist on the closing date of a fiscal year? Any school boy knows that important changes in trade conditions do not occur in a single day.

Why should there be a radical difference in the income statements of three concerns engaged in the same kind of business, merely because their fiscal years end November 30, December 31, and January 31, respectively? All are affected equally by an upward or downward trend in *prices;* yet the balance sheets of these three concerns, prepared in 1920 and 1921 under the old rule, differ widely because published quotations showing radical changes in prices make it appear that the changes similarly affect *values*. It is a fact that two out of the three are not truthful balance sheets; instead of reflecting facts they ignore facts. What is more concrete than a definite trend in an industry? Raw materials go up or down in price because of changes in financial and labor conditions; these influences permeate the distributing and manufacturing sections of industry, and sooner or later retail prices are affected. Such fundamental movements do not produce their full effect in a period of one or two months. The average business man is able merely to guess when the peak of prices or the point of lowest depression will be reached, but the trend is usually unmistakable. As all inventory values are matters of opinion, there is no good reason why an actual trend should not be reflected, rather than to refuse to adjust values on the ground that the fluctuations are not permanent.

Interdepartmental or Intercompany Profits

In the case of large enterprises where the article which is finally sold to the public passes through several departments or through several companies whose assets will be included in a final balance sheet, it is very important that any profits which have been included in their figures by the departments or com-

panies when billing the product to other departments or companies, should be eliminated from the inventory prices. If it is not possible to get such actual profit figures, an estimated reserve should be provided, based on the best information obtainable to exclude the approximate amount of profits in sales price which has accrued to the department or subsidiary selling the same or furnishing service in connection therewith.[20]

Segregation of Stock Which Cannot Be Converted into Cash Within One Year

In discussing accounts receivable it was pointed out[21] that accounts not due within one year should not be classed as current assets unless the accounts receivable of an industry as a whole are known to mature over a longer period. The author has found no such restriction on inventory valuations. Deeds of trust which carefully provide that accounts receivable are not current assets unless due within one year, place no limitation on the conversion period of inventories. There does not seem to be any good reason why inventories should not be segregated into classes depending on reasonable estimates as to when they will be converted into accounts receivable or cash. It would be a shock to some credit grantors if they were to receive carefully prepared estimates of the *earliest* dates by which certain parts of inventories could be disposed of. Some concerns manufacturing machinery for which repair parts are supplied carry unnecessarily large stocks of such parts. In some cases a ten-year supply is carried. Is it proper to carry the valuation of stock which at the earliest will not be disposed of for ten years as a current asset? The author thinks not, and advocates the segregation of inventories into two classes, one which may reasonably be expected to be converted into accounts receivable or cash within one year, and the other representing realizations beyond one year. For the present it is good accounting practice to include both classes of inventories as current

[20] For further discussion of this point, see page 317.
[21] See page 100.

assets, but after a sufficient number of concerns make the segregation it may be expected that custom will demand that class number two be transferred to the fixed assets group.

Auditor's Legal Duty as to Inventories

In a celebrated English case[22] it is held by the court that an auditor is not a valuer; that it is not his duty to take stock; that in the absence of suspicious circumstances he is entitled to rely upon the representations of responsible officials; and that he is not guilty of negligence if he accepts the certificate of such persons to the value of the stock-in-trade.

The auditor's course, therefore, is to secure all the evidence within his power to demand, and, lacking any part of the proof which he deems necessary, his only course is to qualify his certificate accordingly.

The author thinks that accountants in England rely too much on the decision of a Lord Chief Justice to the effect that the auditor "is not called upon to be suspicious, nor even to make inquiry, provided that nothing comes to his notice to cause him to think that there is need."[23] This may be law, but it is a poor rule to insert in an audit program.

It may be that the borrowers and debtors in the United States overstate their inventories and deceive their creditors to a greater extent than is the case in England. If so, an auditor there may be justified in accepting the certificate of someone else as the sole check on the stock, but an auditor here who desires to acquire a reputation for dependability should not be content with this measure of his duty.

Is it not true that the stockholder or banker is being taught to look on the professional auditor as a sort of watchdog—one who detects all irregularities, insists on businesslike methods, sees that the accounts are stated clearly and correctly, and prevents unsatisfactory conditions generally?

---

[22] *In re Kingston Cotton Mill Co.*, 2 Ch. Div. 279 (1896).
[23] *Ibid.*

Now what more important element of business is there than "stock-taking"? Is it not the most important of all? On it may depend financial success or failure; on it dividends may be paid or passed. Is it not, then, in every sense of the word, a financial transaction to be audited?

The English law says that the auditor is using reasonable care and skill when he accepts the certificate of a responsible official. The profession will not advance in usefulness and standing if this is to be the standard on this side of the Atlantic.

The author differs from those who maintain that an auditor, *not* being a valuer, has no right to attempt to pass upon physical valuations, including stock-in-trade and plant; his opinion is that an auditor's duty is not properly performed unless he does all that his experience and skill enable him to do.

Numerous instances may be cited in which professional auditors, without any special knowledge whatever in particular lines of business, have detected overvaluations, excessive statements of quantities, and misstatements as to the condition of the stocks. Some of these discoveries are of sufficient importance to stop the sale of a business or the extension of a line of credit by a banker.

In many of these cases the inclusion in the certificate, by the auditor, of a statement to the effect that he has accepted the inventory valuations without verification, would have been acceptable to his client at the time, but subsequent events would have demonstrated the worthlessness of the report from a practical point of view.

Looking at it from another angle, it may be asked: Why not as well accept a certificate from the cashier to the effect that the cash balance is duly accounted for, as accept the certificate of the stockkeeper to the effect that the materials and goods under *his* care are on hand?

Interest Not an Element of Cost

The question whether or not interest on capital invested in plant is an element of the manufacturing cost of goods, has been

fully debated by accountants and economists. Those interested in the arguments used on both sides of the question should consult the volumes of the *Journal of Accountancy*.[24] The author takes the definite position that it is fallacious to treat it as an element of cost.

Apart from other and good reasons, the fundamental difficulties involved in the attempt to standardize the interest charge are so great as to prove the weakness of the argument. Interest rates and the actual cost of invested capital vary to a marked degree. For example, if the capital of one concern is secured by the sale of common stock at par, and that of another by sale of an 8 per cent preferred stock at 90, redeemable at 125, what interest rates, respectively, should be used? These examples are not extreme; they are fairly typical of corporate financing.

A fixed, or arbitary, rate cannot be used, since it is neither fish nor fowl. The proponents are sadly at sea as to details. Is interest (if the rate be found) to be calculated on the cost or value of land, buildings, and equipment; on tools and fixtures; on raw materials and goods in process; or, as has been suggested facetiously, on wages from time of payment to time of completion? If charged into costs, what corresponding credit is to be made? If to income, it might easily result in a new concern showing a handsome profit from manufacturing before a dollar's worth of goods is sold.

It is argued that there is no difficulty in determining a rate, because the only basis is the rate which the owner could obtain upon his capital if securely loaned instead of being invested in his own business. Not many years ago good 4 per cent bonds sold above par; today the same bonds sell at not much more than half the former prices. The term "securely loaned" is too vague to be used as an important element in determining the cost of production. It is never denied that accurate costs are valuable for

[24] Consult also the *Accountants' Index* and the bibliography given in the *American Economic Review*, Vol. x, No. 3, pages 562–3. Also consult papers and discussions, Convention of the National Association of Cost Accountants, September, 1921.

comparative purposes; but how many business men agree on an interest rate for money "securely loaned"? If they do not agree and a speculative and fluctuating element is introduced, the value of comparison is greatly lessened.

Important reasons for determining the cost of goods are the need of solving inventory problems and of establishing sales prices. In the former case the inclusion of interest results in padding the inventory and, if approved by an auditor, justly subjects him to criticism by bankers. In the latter case no substantial benefit is secured. Intelligent manufacturers, in fixing the selling prices of goods, if not wholly governed by the prices established by competition, give due consideration to all costs other than manufacturing, such as administrative and sales expenses. They can be depended upon to consider the possible return upon invested capital, either as a specific rate which they desire to earn or as "all the traffic will bear." If a specific rate is in mind in a manufacturing business, it can hardly be less than 12 or 15 per cent per annum; it is not likely that any manufacturer will include such a rate as part of manufacturing cost.

All costs, properly calculated, include a provision for the upkeep and renewal of the plant. Anything beyond this must be an earning or profit arising out of the use of the plant. It is true that modern conditions seem to force a constant increase in plant investment, frequently out of proportion to increased output. This tendency, however, cannot be overlooked, because there is a corresponding increase in depreciation charges, in addition to increased capital investment upon which a remunerative return is expected.

It is not a good argument that a manufacturer must be urged to include interest as a factor of operating cost, because otherwise he will not realize that goods produced by the use of expensive machinery may actually cost as much, or more, as goods produced by hand labor. It is inconceivable that a manufacturer who must constantly weigh the advantages and disadvantages of various methods of production, can remain ignorant of the fact that

machinery costs money, must be maintained and renewed, and that the sales price of his product should include an adequate return upon the capital invested.

It is unsound argument to say that interest on the investment must be earned. Unfortunately, manufacturers do not always realize sufficient profit to equal a fair rate on their investment. It is absurd to charge, say, 6 per cent interest on capital as an element of manufacturing cost, and then in the income account show a loss equal to 3 per cent. Such books are erroneous. Actually the plant has earned 3 per cent net on the investment; it has not earned part and lost part. It is synonymous with partners' salaries. A partner acting as superintendent of a factory, who includes in the pay-roll a weekly allowance of $100 to himself and charges it as a factor of manufacturing cost, deceives himself if he thinks the factory *must* stand it. If the final result for the year shows his share of the profits to be $2,600, after treating the "salary" as an expense, mere bookkeeping entries cannot obscure the actual result, i.e., that he has realized $7,800 for the year.

For an interesting legal decision supporting the contention that interest on capital invested in a business is not an element of cost, see the *Journal of Accountancy* (Vol. XVI, page 145) and other cases cited therein.

CHAPTER IX

INVENTORIES—RULES FOR VALUATION

In the preceding chapter, the principles involved in the valuation of inventories have been discussed. It has been shown that the old rule of "cost or market, whichever is lower," is not trustworthy in a period of violent fluctuations and when there is no agreement as to the definitions of the words "cost" and "market." In this chapter the author suggests a more comprehensive general rule, followed by specific rules for verifying quantities, quality, and other elements almost as important and necessary as the element of valuation.

Proper Rule for Valuation

Inventories should be valued at cost or market prices when there have been no substantial fluctuations in selling prices or costs during the preceding fiscal period and in so far as the results fairly reflect conservative values for balance sheet purposes. It is obvious that in normal times cost and market prices are practically the same; the term "market" is synonymous with replacement cost; therefore, when there have been no radical fluctuations in values or methods, original cost and replacement cost are the same, or so nearly the same that the rule of "cost or market, whichever is lower," is a satisfactory one and does not deceive those who use balance sheets. When some other method is required to produce fair values for balance sheet purposes, good accounting practice sanctions the substitution of one of the following methods:

1. It is proper to value inventories, or portions thereof, at more than cost and in some relation to net sales prices, when:

(a) Costs are difficult to determine due to inherent difficulties, such as occur when several commodities are produced from one

process, or due to accounting difficulties which occur when raw materials are bought at widely fluctuating prices, etc.

(b) Costs are substantially below replacement costs.

(c) Firm sales have been made and cancellations are definitely deemed to be improbable, whether or not market prices are advancing.

In (a), (b), and (c) the unrealized profits and the asset accounts arising therefrom must be separately stated in the income account and in the balance sheet. If it is not deemed to be desirable to show the segregation, the auditor should refuse to certify to the balance sheet. Without segregation it is assumed that the usual rule of "cost or market, whichever is lower," has been observed.

In (a) and (b) proper consideration must be given to the operations of the succeeding period which should be permitted to realize a reasonable profit from handling the inventory. When the book cost of producing copper is 12 cents a pound and the market price is 24 cents, it would be proper to inventory *unsold* copper, say, at 18 cents. This method roughly divides the profit into two parts: first, the increment in value which has definitely accrued before the date of the balance sheet, and second, the profit which any business should realize from sales. In all cases the balance sheet should contain understandable explanations of the method. The clearest method is to show inventory at cost in one item and increment in value in a separate item.

In (c) a higher basis of valuation may be allowed than in (a) and (b). The part of the inventory which is sold and which good judgment justifies treating as finally sold, is more accurately to be compared with accounts receivable than with unsold goods; therefore the succeeding period is not necessarily entitled to the full profit on sales which it has no part in closing. Copper which costs 12 cents and is sold for 24 cents a pound may be inventoried at, say, 22 cents a pound if 2 cents a pound is ample to cover all expenses (including overhead) to time of collection of the proceeds.

2. It is proper to value inventories, or portions thereof, at less than cost or market, when:

There is what is believed to be inflation of current or replacement costs. The balance sheet must show the basis of valuation, which presumably will be an estimated past or future replaceable *value* as distinguished from temporary costs.[1]

3. It is proper to value inventories at cost, even though cost is higher than market, when:

(a) Basic commodities or staple goods are temporarily quoted at less than the fair costs of production. This exception must be strictly construed. There must be an honest belief that the decline below cost of production is only temporary. Even then it is easy to make mistakes. It is permissible to assume that basic materials never remain below cost of production for any extended period of time; but costs of production also decrease. The latter factor must not be ignored.

(b) Raw materials or other goods have been purchased at higher prices than those existing at the date of closing, and such purchases are allocated to contracts or orders which are not subject to cancellation, the contract or sales prices of which are based upon the high cost of such raw materials.

In both of cases 3 (a) and (b) the balance sheet must show the basis used. Apparent market prices are ignored in both instances, but there must be some relation to actual values, or else the method is not justified. If what is believed to be a temporary decline merges into a permanent decline, the basis of valuation will prove to be erroneous. Therefore, the method is somewhat dangerous and may be used only when it is boldly shown on the balance sheet so that no one is deceived. If the valuation is justified as of the time it was made, no blame attaches to those who fixed the values. If there was not sufficient justification for the valuation, those who used bad judgment must assume the responsibility. The usual reason given for not reducing inventories

[1] An example of this will be found in the United States Steel balance sheet as of December 31, 1920. See page 125.

of basic materials to apparent lower market prices, is that large quantities cannot be purchased at less than cost of production. The reason fails if it is probable that large quantities *can* be purchased at the lower prices. When apparent market prices are not considered to be representative, the basis suggested in effect substitutes real market prices which are assumed to be reproduction or replacement costs.

Rules for Verifying Quantities and Other Factors

The author has compiled some simple directions for use by those who desire to make a real test of the item which frequently is the largest in a balance sheet. If these are followed with care, and the auditor has given careful consideration to the general principles discussed in the preceding chapter, he need not hesitate to certify to the accuracy of the inventory item in the balance sheet.

These rules rest upon the assumption that, since an auditor is not a valuer, he is not charged with a special or technical knowledge of the elements surrounding stock-in-trade; so that if he exercises due care and skill he may feel that he has conscientiously discharged the duties imposed upon him. They are submitted as a guide to the auditor, who desires to do everything reasonably possible to inform his clients as to the exact condition of the business under examination.

1. Ascertain whether all of the items included in the inventory are owned by, and are under the control of, the concern under audit. Stocks are often hypothecated, and, if so, the fact must be stated in the balance sheet.

2. Secure the original stock sheets, no matter how rough or soiled they may be. Decline to accept "fair" copies unless the originals have been destroyed, in which case consider that a prima facie case of concealment has been made out and require strong affirmative proof to account for the missing records.

3. If not certified to or initialed by the persons who took the stock, by the persons who made the calculations and the footings, and by those who fixed the prices, have this information supplied

and ascertain that the persons who made the certificates or who supply the information are trustworthy and take the matter seriously. Insist on a clear and detailed statement in writing as to the method followed in taking and pricing the stock.

4. Test the calculations, including all large items, and prove the footings. The term "large items" includes quantity, prices and total amounts. If the inventory is a very extensive one and is made up largely of small items, prove the footings by sight, i.e., foot a page or two and use the totals of those pages as a mental guide in looking over the other pages. Many instances have been found where serious errors have been made both in calculations and footings, so that an auditor who fails to cover this point is open to criticism. While verifying the arithmetical accuracy, care should be taken to make sure that the units are stated properly, that is, that dozens are not taken for gross, etc., or that prices per hundred or per thousand are not applied as unit costs.

5. Where stock records of prices and quantities, or of either, are kept, compare the totals of the physical inventory with the book figures and trace any material discrepancy. Where these comparisons disclose repeated shrinkages and the physical inventory was taken some months prior to the date of the balance sheet, allowance should be made for the estimated similar shrinkages in the period since the last physical inventory based on the shortages in prior periods.

6. Where stock records are kept and no physical inventory has been taken, the former must be very carefully investigated as to the method in use, the care taken in carrying out the system, and all other features connected therewith which will assist in forming a conclusion. Ascertain when the last physical inventory was taken and compare same with book records. If no recent comparison is possible, select a few book items of importance and personally compare with the things themselves. If discrepancies are found, do not assume, without further proof, that they are clerical errors only. Large thefts of goods have been discovered by tests of this kind.

7. Ascertain that purchase invoices for all stock included in the inventory have been entered in the books. Look for post-dated invoices and give special attention to goods in transit, the aggregate of which shall be included in the inventory and entered as accounts payable.

8. Ascertain that nothing is included in the inventory which is on consignment from others but which is not owned. If goods consigned to others are included, see that prices are placed thereon consistent with the remainder of the inventory, less a proper allowance for loss, damage, or expenses of possible subsequent return. This does not include goods at branches, since the valuing of such stocks is governed by the same principles as apply to the head office. Ascertain that nothing is included which has been sold and billed and is simply awaiting shipment.

9. If duties, freight, insurance, and other direct charges have been added, test same to ascertain that no error has been made. Duties and freight are legitimate additions to the cost price of goods, but no other items should be added except under unusual circumstances.

10. Cash discounts (that is, those for bona fide prepayment and of 2 per cent "flat" or under) need not be deducted from inventory prices when the concern consistently treats such discounts as a separate item of income.[2] Discounts of more than 2 per cent are not strictly cash discounts and should be deducted from purchases and from inventory valuations.

11. Sometimes cash discounts are deducted from the purchase figures before invoices are entered in the books, and transportation charges are added. In such cases care should be taken to see that the inventories are figured on the same basis.

12. Select a fair number of items and compare the inventory *prices* with the most recent purchase invoices for the same kind of goods. If the prices vary, ascertain the average cost of recent purchases.

---

[2] See page 231 for comment on this rule.

13. Make an independent inspection of the inventory sheets to determine whether or not the *quantities* are reasonable, and whether they accord in particular instances with the average consumption and average purchases over a fixed period. If there are overstocks the quotations for similar goods are not conclusive, because it is obvious that similar goods in quantity are not wanted, and if not wanted there may be no fair bid price under such conditions. Exceptionally large quantities of particular items always deserve special inquiry; some general familiarity with the normal stock which any well-conducted concern in the same line of business should carry is very desirable.

In the *Kingston Cotton Mill Company*,[3] an English case, the auditor failed to discover inflation, of some years' standing, of both quantities and values in the inventories of cotton and yarn on hand. It appears to have been admitted that a comparison of the quantities of cotton purchased and of yarn sold with the quantities in the inventories certified to the auditors by the managing director would have disclosed the fact that the quantities as stated in the inventories could not be correct; yet, despite this, the court held that the auditors were not guilty of negligence. The inventories were entered in the balance sheets "as per manager's certificate," and the court appears to have taken the view that there was no obligation on the part of the auditors to go back of the manager's statement. Most prominent American accountants would now, however, probably agree that such a failure to discover the true state of affairs when the means for doing so were available is inexcusable.

Remember that, in many classes of goods of which full stocks must be kept, the sale of a few articles at a large gross profit is sometimes depended upon to offset the probable loss on the goods unsold in the same class. The residual stock of such classes may have little or no value.

Unless abnormal conditions make the test worthless, attempt

---

[3] 2 Ch. Div. 279 (Court of Appeal, May 19, 1896).

to check the aggregate of the inventory by the "gross profit test" and compare the percentage of gross profit with that of previous years.[4] In a business in which the average gross profit remains fairly constant, this test is trustworthy, because, if the rate of gross profit is apparently not maintained and the discrepancy cannot be satisfactorily accounted for by a rise or fall in the cost of production or of the selling price, the cause of difference is usually due to errors in stock-taking or to the improper inflation of values.

14. Compare the inventory sheets in a general way with those of the previous period, for the purpose of noting any variation in the prices at which similar classes of stock are taken. Classify the inventories of both periods by commodities of the same class and also by locality.

15. After this is completed and other parts of the examination about concluded, apply the knowledge so acquired to answering the following questions:

(a) Is any of the stock damaged, or depreciated in quality?

(b) Have the styles or shapes changed?

(c) Is any of the stock obsolete, out of date, of a size or quality no longer used?

(d) Have purchases been made in gross or dozen lots to secure a low price, leaving many odds and ends of broken lots?

---

[4] In the *Journal of Accountancy* for March, 1921, page 225, the gross profit test is explained as follows:

"Stock on hand may be estimated at dates between the taking of physical inventories by applying the gross profit method. The rate of gross profit on sales since the last inventory may be estimated on the basis of the rate of gross profit earned on sales in prior periods. Any changes during the period in the cost or selling price of merchandise would have to be taken into consideration in estimating any probable variation between the rate earned in prior periods and the rate earned in the current period. The sales since the date of the last inventory would be multiplied by this estimated rate of gross profit to determine the estimated gross profit on the goods sold. Then the sales minus this estimated gross profit would be the estimated cost of goods sold since the last inventory. The opening inventory plus the purchases, freight, and other additions to the cost of goods, minus the estimated cost of goods sold, would give the estimated inventory."

The physical condition and salability of the stock must be considered. If it has deteriorated or if part of it is out of date, or otherwise unsalable, it loses its most important aspect—availability. This is a most difficult fact for the auditor to determine. He must depend upon his intuition and upon inquiries to determine whether or not the stock is in good condition and merchantable, supplementing this, of course, by certificates from those in charge of the departments concerned covering this point fully. When any part of an inventory would not be replaced if it did not exist, a prima facie case exists for marking down the value. In many cases the actual market value of overstocks or old stocks is far below the nominal quotation for similar goods. The question to be answered is: What is the highest price I would pay for the goods in question? The possibility of resale is an important factor, but, if there were a good demand for the *entire* stock as it stands, the question of its deterioration would not be under discussion.

16. Scrutinize sales since the inventory date. Compare some of the items to determine whether there is ample margin between the two prices to cover all expenses of sale and handling, plus a profit. Otherwise it may be inferred that the inventory was padded, and that just cause exists for a more comprehensive examination.

17. In case of goods which are protected by firm sales orders, some auditors consider it proper to value them at cost, or as near cost as is justified by the prices at which the orders were taken, even though such valuation is higher than present market. It should be borne in mind, however, that sales orders are a very uncertain quantity in a declining market, and the auditor should consider the standing of the customers, the form of order (whether subject to cancellation for any cause), and the custom of the trade, in determining how far they are to be treated as a justification for inventorying high cost goods at more than current market values.

The relation to one another of the outstanding sales contracts

and raw material purchase contracts should be carefully inquired into. In some lines especially, it is possible that low cost material originally purchased to cover long-term sales contracts (taken at corresponding prices) may in effect have been used to fill high-priced sales contracts taken for immediate delivery. The result is that when the higher-priced raw materials (purchased to cover the high-priced sales contracts) are received, they will be used to fill low-priced sales contracts, possibly at a loss. Businesses in which this is a likely contingency should have their accounting system or their inventory methods so arranged that they will take cognizance of, and provide automatically for, this contingency.

While not strictly connected with the inventory verification itself, mention may not be amiss of the necessity for ascertaining whether all materials or merchandise required to fill outstanding sales contracts have been either purchased or can be secured at prices which will yield the usual margin of profit.

18. When the audit is being made, during the taking of the inventory or immediately thereafter, select some items from the inventory sheets and verify by inspection of the goods on hand. It is very important in making this test that the auditor should work from the sheets to the stock, because it is obvious that if the inventory is overstated all the stock actually on hand will appear on the inventory sheets, but on the other hand some items would be on the sheets for which there were no goods actually on hand.

19. Verify stock held in public warehouses, mills, bleacheries, etc., by correspondence. In some cases an examination of a negotiable receipt is considered sufficient, but even then it is better to make the usual verification by letter.

These suggestions may seem unduly extended and some of them not applicable to a small business, or to the case of a quick examination made to ascertain the condition of a business. Close study and slight modification to meet particular circumstances will, however, prove their practicability. For discussions

of the best accounting methods of valuing and verifying inventories in particular trades and businesses, see Volume II under appropriate headings.

Goods in Process

If an adequate cost system is in use, and is accurately kept, it will be found that monthly, or more frequent, book inventories can be consulted. Comparisons should be made of some of the items with actual physical inventories, and, if any material discrepancies exist, they should be investigated.

The factors which enter into the cost (not the value) of goods in process of manufacture are: materials, labor, and factory overhead expenses. It is *not* good accounting practice to increase the book cost by the addition of any other elements.

If a good cost system is not in force, it is almost impossible for an auditor to verify the goods in process section of the inventory satisfactorily. Where applicable, the general rules cited above for inventories should be followed, but most of the items will have lost their identity. The difficulty of the task must not excuse the auditor from further inquiry. He will find in nearly every case some information bearing on the most important thing he wishes to know, viz.: Is the inventory fairly priced, or is it overstated?

The financial standing and profits of the undertaking must also be taken into consideration. The concern which realizes good profits is not so apt to overstate its inventories as the one which is hard pressed for capital or which is unprofitable. In the latter cases nearly everyone connected with them may be depended on to bolster up a weak statement as much as possible. No item in the inventory is easier to juggle with than that of partly manufactured merchandise. The most practical test is an examination of such cost records as may exist. However crude the accounting system, no concern of any size is without some sort of cost records. It may be difficult to get access to them, since many so-called practical superintendents are strangely non-

communicative as to how they arrive at their costs. They support, with much vigor, the contention that modern cost systems are complicated and no good, and that they can calculate their costs exactly without so much detail; but they rarely consent, voluntarily, to open up their records. Yet there must be somebody who makes up the costs, and the production of these records should be insisted upon. The cost sheets should show the successive steps of each article manufactured, and some of the stages may be identified with the inventory items.

The auditor should probably leave this part of the audit until the end. If the valuations of raw materials, manufactured goods, plant and machinery, accounts receivable, etc., are conservative, he is not called on to make an exhaustive inquiry into goods in process. On the other hand, if other items are overvalued, the chances are that this item will be overvalued even more, and he should act accordingly in making his recommendations as to reductions in inventory valuations. When market conditions have changed since the cost bases of the goods in process were determined, it is necessary to adjust the total values to conform to the changes made in the stock of raw materials.

It seems hardly necessary to add, that in passing upon the valuations of all stocks of partly finished goods it should be definitely ascertained that all of the stock will be completed within a reasonable time.

Finished Goods

If a good system of cost accounts is not in force, difficulty will be experienced in passing upon the prices placed upon stock-in-trade which has been wholly or partly manufactured by the client. If the cost system is accurate and trustworthy, care must be taken to ascertain that the results secured with it are used as the basis for the inventory. A practice which deserves condemnation is that of pricing finished goods at *sales* prices irrespective of firm orders, less an estimated cost of delivery and similar charges.[5] This, of

[5] For discussion of exceptions to this general rule, see page 147.

course, anticipates the entire profit on such sales, but it is not considered to be conservative to take credit for profits which are not fully earned, until delivery has been made and a cause of action established against a solvent debtor. Until delivery has been made and the goods accepted, the sales contract is not complete. It is not uncommon for orders to be canceled or goods refused for so many reasons that they cannot be enumerated here, therefore conservative manufacturers rarely consider that any profit is earned on undelivered goods. When for balance sheet purposes it is deemed to be advisable to show the value rather than the cost of part of the inventory, the unrealized profit must not be merged with the current income but must be separately stated.

Some cost systems include ordinary overhead charges, and others go so far as to include rent and interest. In a balance sheet which is to be used as a basis for credit, the item of interest should not be considered as a part of the cost of the goods unsold, and other items nearly as questionable, such as rent, administrative salaries, etc., should be excluded, unless the auditor is fully convinced that their inclusion is in order. In other words, do not certify to an "inventory at cost" item in the balance sheet unless assured that "cost" in that particular case carries with it its own explanation, and that subsequent criticism cannot arise. "Cost" may include all expenses incurred in manufacturing, except selling and managerial expenses, but no profit may be included. Selling and administrative expenses continue after the inventory date. Those incurred prior thereto should be charged off.

It is obvious that the "inventory at cost" item should be so certified only if the cost price is below the net selling price, allowing for *all* expenses of sale and carrying, and if similar goods cannot be duplicated in the market at a smaller cost. This may be a difficult point to pass upon, but it must nevertheless be dealt with. One test is found in the general results of the business. If conducted at a loss, it may easily be true that costs are excessive, so

that to use such figures would be to overvalue the assets to that extent. If a factory is running on part time only, or if it is a new enterprise, the actual cost of production may be in excess of the market value of similar goods. In such cases the stock should be marked down to the market price.

In other respects the procedure in verifying the inventory of finished goods is the same as that suggested for "raw materials."[6]

If by-products are manufactured from the scrap or waste material, and if the by-product cost includes the cost of the raw material which would otherwise be scrapped, the auditor should satisfy himself that the cost of the main product does not also include the value of the scrapped material.

Supplies, Stores, etc.

In addition to the regular stock-in-trade, other supplies are usually on hand and should, of course, appear in the inventory, unless the total value is very small.

These items should be separated from the merchandise stock. Such items as fuel, office and factory supplies, and similar materials and stores are in the same class as raw materials. Repair parts and construction items are not current assets. Ordinary repair parts and similar items which are to be used and charged to maintenance, say, within a year, are current assets and may be included.

The general rules of inventory valuation apply. Care must be taken that nothing is included except usable items. The auditor should demand the original stock sheets and test their accuracy sufficiently to satisfy himself that the items are genuine ones, and that quantities are not overstated.

It is sometimes found that partly used articles are included under this caption; except under special circumstances, it is not proper to include anything except new and usable materials, which would have to be duplicated at the same or a greater cost if they were not on hand.

---

[6] See page 162.

CHAPTER X

BALANCE SHEET AUDIT—FIXED ASSETS

In a balance sheet audit the duty of the auditor regarding current assets differs from his duty regarding fixed assets; as to the former he must, upon his own responsibility, verify both existence and value, or else specify in his certificate the extent to which he has relied on the statements of others; as to the latter, it is good practice to depend largely on the information to be secured from others.

Nature of Fixed Assets

As distinguished from current assets, those more or less permanent and with which the business is carried on are generally known as fixed assets. Instead of being offered for sale, they are maintained, or renewed, and their use provides the means of carrying on the business. The term "fixed assets" includes land, buildings, machinery and equipment, tools, patterns and drawings, furniture and fixtures, at cost less normal depreciation. When appraisals are made in which appreciation is included, there is no objection to setting up appraised values in balance sheets, provided the valuation is qualified by an explanation and provided the excess of the appraisal above book value is credited to special or capital surplus and is not merged in earned surplus. This practice is not permissible, however, under an agreement with creditors in which fixed assets are mentioned but are not specifically defined. It would be deemed to be a breach of such an agreement if book values as stated at the date of the agreement are increased, except for actual additions to property. The term "fixed assets" also includes notes, securities such as bonds and stocks, and similar items not properly included as

current assets. There also should be included among fixed assets good deferred assets, such as cash deposits not available for current use, development work in mines, cost of contracts, and other prepaid items which are only in part properly chargeable to current operating costs or expenses and which therefore are to be amortized over more than one year's operations, and actual cost of leaseholds and improvements amortized over the terms of the leases (including if desirable the terms of years for which renewable options at stated rentals are held).

But items such as organization expenses, and similar items which are not chargeable to current operating costs of any period must not be included among fixed assets.

The term "fixed assets," as generally understood, does not include patents, trade-marks, good-will, and similar intangible assets, because assets of this nature rarely represent the expenditure of cash. It would seem that whenever patents and similar assets are purchased for cash, the assets at cost price should thereafter be included among fixed assets.

The term "fixed assets" is not synonymous with "tangible assets," since the latter includes "current assets." The term "net fixed assets" is not used because of the difficulty of deciding which liabilities to deduct.

Tangible Assets.—The term "tangible assets" is a technical rather than a legal term. Items are included—such as accounts receivable—which in a strict legal sense are "intangible."

The term "tangible assets" includes current assets and fixed assets as defined, but does not include intangible assets, such as good-will, patents, patent rights, trade-marks, brands, and trade-names. When intangibles have been purchased for cash, there seems to be no good reason why the assets so acquired should not be included among tangible assets when that term is defined, solely to protect bond, note, and preferred stock issues; but the term is not elastic enough in the usual agreement to cover the items mentioned.

When the auditor is not limited by a trust agreement, the expenditure of cash for patents or trade-marks should be included among the fixed assets, with a proper explanation.

The term "net tangible assets" means the excess of tangible assets over all liabilities.

Plant Accounts Must Be Analyzed

When an audit covers several years, or the entire life of the undertaking, an analysis of the items of fixed plant is made in due course and the auditor then has before him all the facts upon which to base an opinion as to whether or not the accounts represent fair cost of the *existing* assets. In a balance sheet audit, however, the period to be covered usually rests with the auditor, and a serious question arises as to how far the book valuations may be accepted as a basis for actual values, assuming that the concern is to be valued as a going business, and that cost, less proper depreciation, is the result desired.

The auditor may as well accept the position here, as with inventories, that he is expected to report the facts about the plant account; where he cannot secure reliable information with respect to plant values he should state in his report that real estate, machinery, and similar assets are stated at book valuations. He should, however, attempt to ascertain whether these book valuations honestly reflect present conditions. His services are of little real value if such items are grossly overvalued and if a net worth is shown which should be corrected by an intelligent use of evidence readily available.

The auditor's duty is to analyze the items of fixed assets as shown by the books, to enable him to ascertain the principles upon which they have been created. In a few large enterprises an item of "plant" may appear which represents an aggregate valuation covering the purchase price of perhaps the entire fixed property. It may be largely overvalued to offset common capital stock issued in payment therefor. In such cases, and in the absence of an appraisal to fix actual physical values, the problem is

difficult and requires more attention than can be devoted to it in a general treatise of this nature. The auditor, of course, cannot intelligently criticize such a valuation, even if it is absurdly excessive, unless he can secure an appraisal, approximate or actual. A statement that the plant is obviously greatly overvalued may lead bankers or others interested to call for an appraisement.

Auditors whose practice is chiefly with large corporations meet with this problem frequently. Mergers and reorganizations lead to the creation of "lump" sums among fixed assets. Any analysis thereof is out of the question. The records are not, as a rule, available, and if they are there are so many changes in the principal items that the auditor is not much better off as a result. The property of large corporations is apt to depreciate or appreciate to a considerable extent; it rarely stands still. The Interstate Commerce Commission requested an analysis of the property accounts of all railroad companies reporting to it, but frankly gave up the problem and finally settled on the requirement that all additions subsequent to July 1, 1907, be analyzed in detail.

This course may be followed to advantage in industrial corporations. The lack of past data is no excuse for a continuance of poor bookkeeping, and the auditor who has any influence in the matter should request that intelligent analyses of all capital expenditures be preserved.

In many corporations the property accounts represent merely the securities issued, and their actual value was not of prime importance to the auditor until the enactment of the Federal Revenue Act of 1917. In this act the basis of the determination of liability for the excess profits tax rested upon so-called invested capital, which in turn was defined to be the cash cost or cash value of assets when acquired. Appreciation was specifically disallowed.[1] It became necessary that books of account should,

[1] For interpretation of invested capital provisions of the Revenue Acts of 1917 and 1918, see *Excess Profits Tax Procedure*, 1921; also see *LaBelle Iron Works v. U. S.*, U. S. Supreme Court, May 16, 1921. Not yet reported. Quoted in full in *Corporation Trust Co. War Tax Service*, 1921, par 899–922.

when feasible, show cost of plant assets less normal or reasonable depreciation. When the books of account did not, or do not, show such figures, it is permissible under the Treasury regulations to adjust the books.

Aside from pre-existing book values of the plant accounts, the auditor is greatly interested in the operation and development of the enterprises and must assume the responsibility of classifying subsequent expenditure between capital and income. In a great many balance sheet audits, data can be secured with little trouble which show the component elements of the values, viz., the book cost of the various divisions of the plant and equipment accounts, also whether the charges appear to include only items of additions and betterments, and whether depreciation has been provided for.

In brief, in all balance sheet audits the auditor must, if possible, secure an analysis of the existing book valuations, even if it is necessary to go back over the transactions of many years. The absence of plant ledgers containing explanatory details is an omission which should be commented upon unfavorably. The borrowers whose books do not lend themselves readily to an audit by professional accountants are usually the ones whose financial statements require serious scrutiny on the part of prospective lenders and creditors.

METHODS OF ARRIVING AT BALANCE SHEET VALUATIONS

We are dealing with enterprises which are continuing in business, of which a forced sale or liquidation is not contemplated; so that in attempting to fix the net value of a concern's fixed assets we may say that, as a general rule, the correct basis is cost, less an adequate allowance for depreciation, due to wear and tear and obsolescence.

It need not be considered (although it is true) that the dismantling of a plant or a forced sale under unfavorable circumstances will seriously disarrange the book values, provided the

latter are based on the foregoing rule. This aspect of the case is well known to all interested parties and no one, not even a banker, contends that the balance sheet of a live enterprise should exhibit its assets at a "scrap" valuation.

There is no uniformity in terminology regarding plant assets in balance sheets. In a few cases plant and good-will are not separated. In the case of the best concerns, plant accounts are segregated to some extent and in the balance sheet or in the auditor's certificate the statement is made that adequate provision has been made for depreciation. In perhaps the majority of cases the amounts of depreciation reserves are shown. In those balance sheets where there is evidenced the greatest desire to keep stockholders and others informed, the additions and the depreciation for the period are shown. The practice is common enough to justify the statement that under good accounting practice changes in depreciable assets—additions and deductions—are shown in balance sheets.

In arriving at the book value of plant and property as a going concern, it is necessary that the proper distinction be drawn between:

1. Additions to be capitalized.
2. Renewals to be debited to depreciation reserves.
3. Current repairs to be absorbed in operating expenses.

When dealing with the foregoing in theory and when books are properly kept, the distinction is so clear that any discussion seems superfluous. When dealing with past transactions, mostly without details, the auditor sometimes finds the task to be hopeless. When books are not properly kept it is necessary, in respect to (1) to secure a description of what, if any, additions have been made, and then to ascertain to which accounts the cost of the additions has been charged. If not capitalized, the items should be transferred to asset accounts. In respect to (2), it is also feasible to secure a general description of renewals made during certain periods. If the renewals have been capitalized or

charged off, it is necessary to adjust the accounts. When depreciation reserves are not kept and the cost of renewals averages about the same over a period of years, the setting up of depreciation reserves and the charging of the cost of renewals against the reserves does not affect the net result. Nevertheless the accounts should be adjusted to give effect to this procedure because tax and other requirements demand that good accounting practice be observed. Careful attention to (1) and (2) will prove to be an almost complete check on (3).

The elimination of additions and renewals from repairs and maintenance accounts affords an opportunity to measure the adequacy or inadequacy of the expenditures for current repairs. Reserves for depreciation are not intended to provide for the current up-keep of plant and equipment. If proper repairs are not made, a going concern property deteriorates to an extent not covered by ordinary depreciation. It is not usual to provide reserves for deferred maintenance except in the case of concerns such as public utilities which are unable to secure funds to care properly for their properties. The mere fact that it is not usual does not relieve an auditor from an investigation into existing conditions. If the repairs and maintenance accounts are unduly low for the period under examination, the auditor should endeavor to ascertain a fair average allowance for such expense, and the deficiency should be charged to operating expenses and be offset by the setting up of a reserve account.

Land and Buildings

Many auditors are too prone to take it for granted that real estate, a record of which appears in the books of account as owned, is actually the property of the business under audit, and that its title is free and clear unless a mortgage appears on the books. In fact, serious flaws have developed in the title to real estate carried as an asset on balance sheets which have been relied upon as a basis for credit.

This is not a difficult matter to cover; much easier, in fact,

than many of the other items of considerably smaller amount on the balance sheet. The most practicable method, and one on which an auditor can rely, is to secure from the attorney or from a title company a letter or certificate, properly signed, stating:

1. Whether the title to the real estate as it appears, or as it is described, on the books, is in the name of the individual, firm, or corporation whose name appears at the top of the balance sheet or in the auditor's certificate.
2. That the said real estate is free from any liens whatever, including the following:
   (a) Mortgages
   (b) Judgments
   (c) Taxes, water rent, or other municipal liens

The foregoing liens, if disclosed, should appear among the liabilities, but the time to cover this point in an audit is when the verification of the asset side of the balance sheet is being made.

It may be urged that an auditor should not depend upon the certificate of an attorney when there is no special difficulty in having a search of the public records made by his own staff, or by someone not connected with the enterprise; but in practically all cases the result would not be any more satisfactory, and in most cases difficulties present themselves which make it inadvisable for the auditor to attempt to do the work of a lawyer.

An important distinction which must not be lost sight of is the classification of the real estate. A balance sheet should always show:

1. Real estate used in the business
2. Other real estate (if any)

This segregation applies to all concerns except those in which real estate is dealt in as a commodity. Taken in connection with the income account, it shows at a glance whether the outside real estate is producing enough revenue to warrant holding it; and taken into consideration with respect to the indebtedness, it

affords an opportunity to decide whether it is wise to hold it indefinitely.

1. LAND.—Land should appear in the balance sheet at cost. It should not be written up (except under special circumstances discussed elsewhere), although it may be clearly established that its value has increased. As a matter of fact, an increment in the stated value of land upon which factory buildings are erected, usually means higher taxes, with no increase in earning power, so that an increased valuation is a detriment so far as current operations are concerned. The business does not receive any benefit therefrom except in case of sale or liquidation, and an adjustment of the book value need not be made until these actually occur.

Similarly, if the land has apparently depreciated in value, custom justifies the carrying of this item at cost until realization, at which time only can the actual value be determined.

A distinction must be made between improved and unimproved property. In case of the latter, taxes and other carrying charges are sometimes added to the cost. The auditor should make a careful analysis of the items for use in his report. The facts speak for themselves so strongly that the auditor need do no more than refer to the items. All carrying charges, including interest, should be treated as revenue expenditures unless it is obvious that there is a continuous increase in the actual value of the property. When this is affirmatively shown, the carrying charges may be capitalized.

Where the auditor finds that an adjustment increasing the book value of land has been made, the fact should be noted on the balance sheet. Otherwise a situation like the following may arise:

A corporation had accumulated an operating loss of about $200,000. Its land was within the limits of a large city and had obviously increased greatly in value, but no adjustment had been made for this in the books. The company was at times a borrower up to about a million dollars, and the banks required period-

ical financial statements. The banks did not, however, require, and the corporation did not furnish, the certified statements furnished by the auditors (which exhibited the land at cost and the deficit mentioned above), but the corporation did furnish a balance sheet in which the land value was marked up several hundred thousand dollars—enough to wipe out the deficit and to produce a surplus. As the land valuations were not excessive, the banks were not put upon notice that the company was losing money and that the books showed a deficit.

Property situated in or near a city may appreciate greatly in value as time goes on, due to transfers or appraisements of land similarly located. It must be remembered, however, that it is a fallacy to assume that the value of land available for any kind of improvement can be directly compared with the value of land upon which a manufacturing plant has been erected. The value of the plant cannot be separated from the value of the land itself, because, based upon the assumption that the land could be sold for general purposes, in 99 cases out of 100 the buildings (being adapted for one purpose only) would have to be demolished and the capital loss thus sustained would more than offset the appreciation in the value of the land.

Therefore an apparent rise in the value of the land is not the equivalent of an increase in assets unless the proportion the improvements bear to the entire investment is a small one. The auditor can readily test the propriety of such a statement of increased land value by asking the question: Is the land available for sale aside from the improvements?

Bankers are strangely negligent in accepting unverified statements, when without cost to them, they could just as well have the facts. No borrower can afford to refuse to furnish a certified statement when called upon to do so by a lender.

2. BUILDINGS.—The valuation of buildings brings up the question of depreciation, which is discussed fully in Chapter XXVIII. Following the suggestions there made, buildings should

appear on the balance sheet at cost, and a reserve should be created sufficient to cover the wear and tear, obsolescence, and inadequacy thereof, *accrued* to the date of the balance sheet.

As an aid to forming an opinion upon the value of buildings, the auditor should personally inspect the plant and note whether it appears to be in good condition.

Where land has been acquired through gift from a municipality or public body, title to be transferred when certain conditions are fulfilled, the land should be appraised at the time when it is taken over, but the value should not be included as an asset until all conditions are fulfilled and then at the appraisal value.

Leaseholds

Not many manufacturing plants in the United States are built on leased premises, but inquiry as to this should be made, nevertheless, in *every* audit where real estate appears as an asset. In a surprisingly large number of cases department stores, hotels, theaters, office and "loft" skyscrapers, and other business buildings are erected on land which is leased for a definite term of years.

Prior to the enactment of the federal excess profits tax law in 1917, it was not customary for the owners of such buildings to provide a sinking fund to take care of the diminishing value of their property, or even to charge depreciation as one of their expenses. There were two reasons for this: first, the term is usually a long one, running from 21 to 99 years. In this age of startling changes such long terms or one of 63 or 84 years—the latter being the most popular in New York City—is equivalent, in the minds of real estate operators, to a freehold. No provision for the far-distant future seemed necessary. Secondly, in the great majority of cases land has appreciated in value faster than the buildings thereon have depreciated. For instance, a building on upper Fifth Avenue, New York, built 20 years ago on leased ground, with, say, 43 years to run before the lease expires, could be demolished and the vacant land sublet for a great deal more

than the building is worth, in addition to the rental under the original lease. With similar experiences in other cities formerly it was difficult to persuade the builder that a sinking fund should be created, but after profits taxes became a factor he willingly admitted and claimed that buildings depreciate in value.

It now needs no argument to sustain the contention that the depreciation in value of a building, computed on its life and on the expiration of the lease, is an annual charge against the revenue which the building produces; that unless and until the leasehold is sold or parted with, the only *facts* at hand are that the building is diminishing in value, slowly but surely, from the two causes stated.

An auditor should not set off appreciation against depreciation without so stating the fact in his certificate or showing it on the balance sheet; otherwise he is guilty of conniving at a practice shunned by all conservative men, viz., taking credit in a current period for a prospective profit without showing the facts in all published statements. Nevertheless, he must not ignore the question of a rise in value, since it may have an important bearing on the borrowing capacity of the concern. Therefore, whenever an auditor meets with a claim that the unexpired portion of a leasehold is of great value, he should secure an appraisal thereof by a reliable and disinterested real estate agent, and the value may be reflected in the balance sheet. The offsetting credit must be special or capital surplus—not earned surplus.

If a lease has been purchased, and if the purchase price appears on the books as an asset, the expired portion should be written off periodically. If an appraisal establishes the fact that the price paid was too high, it is wise and conservative to increase the instalments to such an extent that the cost will be written off before the expiration of the lease. But if this is not satisfactory to the lessee, the auditor is not justified in insisting upon it, any more than he is in requiring a tenant, who under a long lease is paying more rent than similar space could be secured for later, to set up a reserve for excessive rent.

Machinery and Equipment

As with buildings, machinery should be valued at cost and an adequate reserve should be provided to cover depreciation. In determining the sufficiency of the machinery reserve, consideration should be given to the question of obsolescence. No general rule can be found which governs the rates of depreciation applicable to a particular plant. Much depends upon the way the machinery is used and cared for. The life of a lathe in one plant may be twenty years; in another the same lathe will be out of commission in ten years.

The auditor must apply the general principles of depreciation to the item of machinery and then bring to bear the special knowledge he has gained of the plant under review before expressing his opinion as to the accuracy, or otherwise, of the book values.

The auditor should not fail to inquire whether a detailed record is available showing the particulars of the cost, etc., of the machinery. In many factories such a record is kept for insurance purposes or as a check on depreciation charges. This record is found usually on cards or in a loose-leaf book, and, as it is not considered one of the regular books of account, it will not be submitted to the auditor unless he asks for it. If accurate, it is an invaluable aid in determining the value of the machinery. The record should show how and when machinery is acquired; cost, including installation; amount reserved each year for depreciation; position in factory, etc.

There is a tendency towards excessive depreciation reserves, in the case of certain machinery of which the important parts can be and are renewed from time to time and where the cost of such renewal is not charged to the reserve. A manufacturer who wants to be conservative allows, say, 15 per cent per annum on machinery. He may set aside this rate for three or four years and make no charges against it for renewals. Now, when it is applied to any particular machine it is apparent at once that it is impossible for the machine, so long as it is not obsolete, to depreciate more than, say, 50 per cent. In other words the machine could not be

operated properly if it were allowed to deteriorate below 50 per cent of its normal condition. Of course, some machinery can be operated fairly well for a long time and then go to pieces all at once. It is claimed that a freight car can be operated at 70 per cent of maximum efficiency on its last trip before it goes to the scrap pile.

There is some basis of reason in a factory manager's contention that his plant is as good as new. He knows that every machine is working to its full capacity, and that any considerable depreciation thereof is a physical impossibility or he could not produce a normal output. The manager, however, confuses depreciation and efficiency. There is, of course, accrued depreciation on every machine, and this is usually admitted, sometimes after a strenuous argument; but the auditor who argues that a five-year-old plant has depreciated, say, 50 per cent, fails to obtain a respectful hearing. He is told that, if it were true, the plant could not be running, and that fact seems to be stronger than his theories.

The real point at issue is that a considerable reserve for obsolescence is necessary in every plant where machine tools and similar equipment are used. Depreciation, as such, cannot exceed a definite limit, but a machine which never requires more than 30 per cent or 40 per cent reserve for depreciation, no matter what its age may be, should have an obsolescence reserve of perhaps as much or more.

Constant changes are being made in factories and mills. Machinery which is comparatively new is set aside or discarded for improved models, and this possibility should influence the auditor who passes upon the value of such assets. In some cases the argument is advanced that the superseded machinery is as good as ever and is always available in case of emergency or a sudden demand for an increased output. This sounds plausible, but does not work out well in practice. The proper value to place upon such discarded machinery, which may be designated as "reserve plant," is the nominal sum of $1, or else an estimated usable value with an offsetting reserve to reduce it to scrap value.

Small Tools.—As a rule, the practice of depreciating this item by means of a percentage cannot be followed satisfactorily. So many small tools are used up, lost, or stolen, that an inventory should be made at periodical intervals and all the tools on hand should then be revalued for purposes of the balance sheet.

If this has not been done, the auditor can fix his valuation only from the best evidence available, but he should insist on a material reduction of the book values, unless liberal depreciation has been provided for.

Furniture and Fixtures

This asset has little residual value. Conservative concerns charge off the larger part of its cost.

In most establishments many items, such as partitions, special shelving, etc., are charged to the fixture account. Frequent alterations and changes are made. For this reason most of such expenditure is for repairs and should be charged off currently. If charged to an asset account, it should be prorated over two or more years' operations.

If alterations are made in leased premises, the auditor must be careful, if the lease is about to expire, to see that nothing is carried as an asset except movable fittings, etc., and that, if they are removable, ample allowance is made for deterioration.

The auditor should not pass the item of furniture and fixtures without noticing their physical condition. His experience should aid in determining the value of this item and he must not be induced to certify to an overvaluation. The amount of fire insurance carried thereon should be ascertained. Fixtures attached to buildings should be insured as buildings, not as movable fixtures. This may be an important point.

Containers

In certain lines of business, such as breweries, milk depots, spring-water dealers, bakers, etc., a considerable number of con-

tainers, such as casks, kegs, bottles, cases, cracker tins, etc., are owned, and used for transportation purposes only, and are supposed to be returned when empty. At balancing time an accurate inventory should be taken, if possible; but if not possible, the auditor must make his own calculations as to the number required for the normal operation of the business. He should then inspect the reserve supply and decline to certify to a greater number than is thus disclosed, unless furnished with unquestioned proof that a larger quantity exists.

In many cases concerns go on the assumption that all such containers are in the possession of someone who will return them in due course, but experience proves that a considerable percentage is lost, broken, or stolen, and that to carry these as stock on hand is to misstate the facts.

Deposits of cash are frequently received as security for the return of containers. The aggregate of such deposits may be large. If so, the auditor should note the relation of this liability to the cash on hand. The deposits constitute a trust fund and should not be used for working capital, although it is hardly necessary to keep a separate bank account therefor. Large quantities of containers might be billed with the understanding that refunds would be made on the return of the containers. If large sums had been collected from such billings and, due to a fall in prices or some other reason, many containers were returned during a short period, it might seriously embarrass the concern required to make such refunds.

Horses

Horses not only become less valuable through age, but depreciate according to the manner in which they are worked. A revaluation on the basis of the age of the horses and of the nature of the business is more satisfactory than is the writing off of a fixed percentage annually. The auditor should, if feasible, count the horses called for by the inventory, although he may be unable to pass upon their condition.

Wagons, Automobiles, etc.

Although these depreciate rapidly, and although the apparent life of automobiles is short, yet it must be realized that the nature of the items permits repairs to be made which largely take the place of renewals. In the case of an automobile, for instance, tires are renewed, the motor may be replaced, and taxicab companies may entirely rebuild the bodies. Depreciation, therefore, as distinct from repairs and renewals, may be a smaller factor than is at first apparent. Of course, full allowance should be made for "accrued" wear and tear, but any such rate of depreciation for taxicabs as has been advocated, viz., one based on a lifetime of three years, is manifestly excessive since many in daily use are four or five years old.

The auditor should verify the number in use in order to ascertain that full provision has been made for those sold, exchanged, or scrapped.

Patterns, Drawings, Lasts, etc.

These items frequently represent large outlays by manufacturing concerns and form a difficult class to value. If they are used for stock, or regular output, their value depends upon their life and upon the probability of renewed use. If acquired or made for special jobs, their residual value is small, and the cost should have been a charge against the jobs themselves. In every case these items should be regarded with suspicion, and overwhelming proof must be adduced before passing any material sum on their account as an asset. The auditor may meet with strong opposition in his efforts to reduce this item to a reasonable value, for it represents the skill and often the affections of the proprietors, who dislike to see its value depreciated.

However, the auditor must be firm and must decline to set up sentimental values as tangible assets. The experienced auditor, upon reflection, will recall the small actual value which this item frequently represents.

The facts are easily ascertained. Public demands change,

and patterns, etc., must be made to suit the changing taste. Likewise, the styles of what appear to be standard patterns for stable businesses change rapidly. Engineers make about as many alterations in their "styles" as do milliners. When demand ceases, most of the old patterns should be scrapped. This rule applies to hardware designs as well as to patterns for ladies' dresses. More than one balance sheet of a hardware manufacturer or of a maker of dress patterns shows a valuation placed on designs which are entirely out of favor.

The charges against this account are usually cumulative, i.e., they follow the output almost automatically, whereas, if any considerable percentage of the old patterns, etc., were available for use, the additions to the account would not keep pace proportionately with the production, but would increase less rapidly. The auditor should apply these tests before accepting the book valuations.

Wherever feasible, he should advise that a conservative course be followed, such as writing down the book value to forced sale value.

Electrotypes, Woodcuts, etc.

The arguments just urged as to patterns apply equally to these. Conservative publishers charge off almost the entire cost of plates as a direct cost of a first edition, and they are careful to revalue the balance of the account frequently. If a book or other publication is successful, the cost of plates, etc., can be readily absorbed in its cost, but if it is not successful, no reorders can be looked for and it would be folly to carry the plates in the balance sheet at *any* valuation except as scrap metal. A number of bankruptcies have occurred in the publishing business through disregard of the uncertain value of such assets.

Patents

Patents are granted in this country for a term of seventeen years, so that in the case of valuable patents a proportionate

part of their cost should be amortized or charged off periodically in order to write off the entire cost before the date of expiration. The cost of patents ascertained to be of no commercial value should be written off immediately.

In many cases a residual value remains which merges into good-will in connection with the handling of a patent; but this is a different kind of asset, and the auditor is not justified in anticipating such outcome, thus ignoring the diminishing period of protection or monopoly. Other instances of depreciation of patents are obsolescence, the impossibility of making the article a commercial or workable success, and failure to induce the public to buy the article. It does not follow, therefore, that a patent remains valuable during its whole life, and, if it does not, revaluation should be resorted to except in special cases when it appears to be justifiable not to write them off and the reason therefor is shown in the balance sheet.

It is not unusual to find that the cost of patents, improvements therein, and experimental work in connection therewith are permanently capitalized, under the theory that there is a continuing value which, it is assumed, will not diminish ratably with the effluxion of time. It is, however, not good accounting practice to adopt such a basis with any asset whose useful life is or may be definitely limited.

The question arises: Should expenses incurred in connection with litigation for alleged infringement be added to the asset value of the patent? Where the outcome of the litigation tends to strengthen the patent rights, there can be no objection to the addition of such expenses to the asset value. When the expenditures are for current protection, it is better practice to write off such expenditures as current expenses.

Expenditures for additional patents, including improvements in basic patents, should be capitalized and amortized over the useful life of the new patents.

The value of patents should not be written up, even though it appears to be much in excess of the original cost. When re-

valuations are made for tax purposes, appreciation should be separately shown in the balance sheet.

The auditor should see the patent papers, including assignments, or else secure a certificate from the patent attorneys to support the item.

The ledger caption of the "patents" account is sometimes the nearest approach to evidence which is called for or submitted. If the ledger account has been arbitrarily so named to offset an issue of capital stock, and is not represented by actual patents of any value, the auditor should insist on a renaming to accord with the facts. He has no more right to certify to a large asset item of "patents," where the value is not substantiated, than he has to certify to any other item the meaning of which is reasonably clear to the public, or which they think is clear to them.

As a matter of fact, an auditor can form a fairly correct opinion regarding the value of a patent. From a commercial point of view, if it is an old one, past results have a definite bearing on the point. Pending litigation furnishes another clue. If it is a new patent, an auditor is as well qualified as anyone else to estimate the outcome of the future. This is not an argument for placing anything other than facts in the written report, but this good rule does not bar an auditor from discussing the matter with his client, or from stating his experience in connection with the subject if requested to do so.

It is sometimes necessary to determine the cash value of patents which have been acquired in exchange for capital stock. If a free and active market exists for the shares, it would seem that willing buyers and sellers themselves are fixing a fair price for the patents. When the market for the shares is not a free market, other evidence must be secured to fix the valuation.[2]

---

[2] The following ruling by the Treasury Department indicates its method of fixing values for tax purposes:

"In the case of inventions, their value is dependent upon proven utility or the likelihood of practical usefulness and therefore stock issued thereon will have a corresponding value. If an inventor should sell a recently patented

When an appraisal is made or patents change hands, it must be remembered that applications for patents may have the same value as patents which have been issued. This is an important point in determining values as of a past date, because the term of protection is extended. If a valuable patent was issued March 1, 1915, and was applied for March 1, 1913, the amount to be written off annually is one-nineteenth of the March 1, 1913 value, because the expiration date is March 1, 1932.

A possible argument against this plan—based on expediency—is that the plan proposed can be applied only retroactively. In other words, the period over which the cost or value of a patent is to be written off cannot be known until the patent is granted, since the period which may elapse between date of application and date of granting the patent is uncertain. Hence the argument has been advanced that there is no necessity for writing off any portion of the patent cost or value until the actual granting of the patent, as it is only then that a limitation on the life of the patent is imposed. This view of the situation facilitates the writing off of annual allowances for exhaustion of the patent cost or value, and obviates the need for any retroactive adjustment upon granting of a patent. This practical consideration, however, is really the only argument to be made for the last suggested method. In principle, the spreading of the cost or value over the entire period elapsed between application for, and the expiration of, a patent is the more accurate method.

---

invention to a manufacturer before its use has been tested, but simply upon its apparent usefulness, it may be said that the invention at that time is worth what is paid for it, because a price has been offered and paid. The measure of value is the price paid. . . . Stock issued upon such invention would be worth the value of the invention, measured by the price which the manufacturer has paid for it.

"Where the inventor himself forms a company and issues stock upon his invention and there are dealings in said stock at or within a reasonable time after the issuance thereof, prices then paid may be said to be evidence of the value of the invention capitalized and therefore of the stock at the time of its issuance. This is upon the principle that a subsequently existing fact is evidence of some probative value of the prior existence of the same fact. . . ." (Solicitor's Law Opinion 962, Cumulative Bulletin No. 2, page 74.)

Copyrights

The same considerations that apply to patents apply also to copyrights, except that in the case of copyrights the term is 28 years, which term, under certain circumstances, may be renewed for another 28 years. As most copyrights diminish steadily in value, depreciation should not be based on their life, but upon revaluation at stated intervals.

Revaluation of each one is the only satisfactory solution. In all cases the auditor should be furnished with a list of copyrights owned. Inquiry based on this list will develop evidence as to the actual worth of the asset.

CHAPTER XI

BALANCE SHEET AUDIT—FIXED ASSETS (Continued)

GOOD-WILL

This asset is in a class by itself. The term "good-will" when it appears in a balance sheet represents the stated value attached to the business over and above the value of the other stated assets.[1] It is such an intangible and elusive asset that it is not subject to wear and tear, and the principles of depreciation certainly cannot be applied to it as to other items. If earnings decline for any reason, except of the most temporary character, the value of good-will declines correspondingly, because by its very nature its value depends on earnings of a certain amount being maintained. The element of earnings is not always insisted upon in cases of old-established businesses which are believed to be inefficiently managed. Good-will, however, always appears, or should appear, on the balance sheet as a separate item, and well-established practice permits it to appear at cost, irrespective of fluctuations in its value. Any gain can only be determined by sale; a decline in value can be determined more accurately. It might be claimed, and rightly, that purchases of capital stock at a price above the book value are the best evidence of the value placed upon good-will by disinterested persons; true, but its actual value changes from day to day, and there is so much uncertainty in any attempt to adjust its book value that by common consent it is usually left alone, except when earnings are unusually large, and it is therefore considered advisable to write it off.

In a few cases good-will has been written up, surplus credited, and a large stock dividend paid. The author has seen an opinion

[1] For methods of arriving at the value of good-will for tax purposes, see *Income Tax Procedure*, 1921, pages 412–419.

written by one of the country's most prominent lawyers advising that, on the ground that over a period of years the corporation had earnings far in excess of normal earnings on its capital, a good-will had been created which it was possible to value. The very existence of earnings sufficient to write it off justifies its retention; whereas earnings that are not up to expectations, and are insufficient to enable a concern to write it off, indicate that its book value is inflated. As good-will does not suffer from wear and tear, does not become obsolete, and is not used up in the operation of the business, depreciation cannot be charged against it. When it is written off, a secret reserve may result, and therefore no objection can be offered to its retention at cost.

The intangible nature of good-will has made it an easy subject of manipulation. Not long ago an able judge held that the use of the term "good-will" to describe overvaluations had been sadly overdone. In the case at issue, stocks and bonds had been issued to owners for their several enterprises and it was obvious that such payments included as much good-will as could possibly be ascribed thereto, and that, further, large blocks of stocks and bonds issued to the promoters for "services" constituted over-issues. He also said that the dummy directors who solemnly voted that the properties acquired were worth the price fixed by the promoters were neither competent to pass thereon nor independent enough to make their decision binding. Contemporary sales of stock, if the market is a free one, are of greater weight in determining value than are appraisals.

Earnings the Principal Factor of Value

Although good-will is said to be the attractive force which secures custom, an erroneous idea sometimes obtains with respect to a business which has not earned more than an equivalent of an average rate of interest on invested capital, plus a reasonable allowance for proprietor's compensation. It is not enough that such a business be long established and have a good line of customers; that prompt service and courteous treatment have given

prestige to the trade-name; that brands or trade-marks have become household words; that the location is ideal and can be continued, and that other equally attractive factors are present.

In fact, these elements are negative rather than affirmative circumstances for the consideration of a prospective buyer, because they leave but little opportunities for betterment. If the business has not shown satisfactory or increasing profits under ideal conditions, how can a purchaser, who usually works at a disadvantage as compared with his predecessor, hope to increase the profits to a point which will equal those of the old business and also yield a further return upon an additional cash investment in good-will?

To have a sales value, good-will must represent a substantial earning power in excess of ordinary interest on capital and managerial salaries combined. There may be a lot of sentiment attached to an old business, but a losing business does not possess any good-will unless there are obvious signs of mismanagement. The plea of bad management is overworked and is too frequently believed to be a conclusive cause of failure. Then, too, profits should be increasing. If the business is standing still, the danger of going backwards is greater than is the likelihood of improvement. There is no certainty that exceptionally profitable past years which serve to increase the average profits over a period of years, can be repeated.

Formula for Determining Value

The usual formula for determining the value of good-will is as follows: Take the average net profits for a term of years, deduct interest on net tangible capital employed; deduct the value (not necessarily the amount paid) of manager's (one or more) compensation; the balance represents the amount of profits which may be said to be attributable to good-will.

In fixing compensation for management, consider the class of business—stable or hazardous; general or special training, experience and ability required to conduct it; general standard of

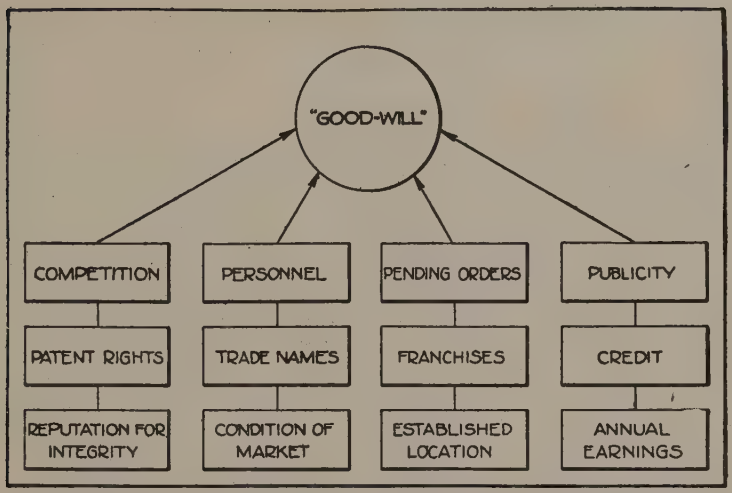
salaries in a similar business or in a business producing a similar amount of profit.

Illustrations of Methods Used in Determining Values.—In the formation of the International Harvester Company, the original contract provided that the good-will value of the consolidating units should be fixed at the sum of the profits of the two preceding years, plus an additional 10 per cent. In commenting thereon, the United States Commissioner of Corporations stated: "This method of valuing good-will was more or less commonly used among manufacturers." Further on in the comment, a decided modification of the rule appears:

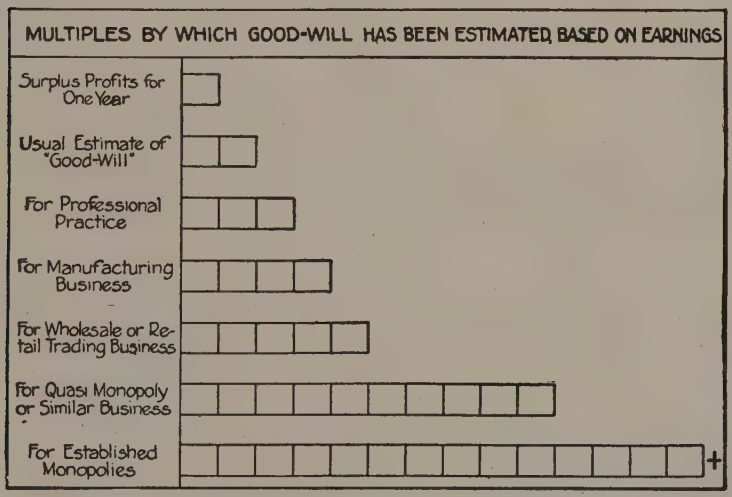
> However, the method of determining the net profits was specifically prescribed in such a manner as to give a much larger amount of profit than that shown by the companies' profit and loss accounts. That is, certain kinds of income and expenditure were not included in the computation, as, for example, interest on accounts and bills receivable and interest on certain accounts payable, and cost of collecting receivables. Furthermore, although the above mentioned contracts provided that depreciation should be deducted from profit, whether on account of plant, materials of manufacture, or of bills and accounts receivable, yet in the computation made of good-will value by the accountants such depreciation was not deducted. The final net profit as fixed by the accounts was not used, therefore, in this appraisal of good-will, but instead a considerably higher amount of profit with a corresponding enhancement of the estimated value of good-will.

Comments by the United States Bureau of Corporations with respect to good-will are of interest. The following quotations are from its reports on various industries:

> There are great differences in respect to good-will between different kinds of business. The most important difference, probably, is that between companies, on the one hand, which sell a staple product which is bought and sold under its staple name without respect to the producer, and companies, on the other hand, which sell an article under a trade-name which is always bought with the knowledge either of the name of the particular producer or of the brand name under which the article is sold. The



Some of the factors that enter into a computation of the "good will" of a business. For obvious reasons these factors vary greatly in importance, dependent upon the peculiar conditions that affect the business that enters into the transaction.


MULTIPLES BY WHICH GOOD-WILL HAS BEEN ESTIMATED BASED ON EARNINGS
Surplus Profits for One Year
Usual Estimate of "Good-Will"
For Professional Practice
For Manufacturing Business
For Wholesale or Retail Trading Business
For Quasi Monopoly or Similar Business
For Established Monopolies
+

The first rule in computing "good-will" is to determine the net earnings of a business, from which sum is deducted the interest on capital actually employed and the value of the owner's services. The result, multiplied ordinarily by two but sometimes by many times that amount, has been accepted as the value of the "good-will."

NOTE.—The above charts are reproduced by permission from *System* for January, 1912.

latter kind of article is generally advertised under its trade-name, and if the business is successful and expanding it has a wide custom, of which the concern making it cannot be quickly deprived in the ordinary course of trade, even by more efficient competitors.

General conditions of trade may undergo such changes that a business once profitable may become comparatively unprofitable. The opportunities for successful business operation may in time be pretty well exhausted, either because the needs of consumers are so well supplied for a long time ahead that demand slackens, or because of other changes in the trade. Again, good-will based on trade-name and custom may be lost to some extent if for any special reason the article of a certain maker acquires suddenly an unfavorable notoriety. In this class of conditions there is no doubt that the so-called anti-trust sentiment is an important example.

Undoubtedly there is a legitimate value attaching to good-will in the tobacco business, that justifies either valuation in excess of the tangible assets or a rate of income on tangible assets greater than the ordinary rate of business profits in enterprises where good-will is not an important factor.

The element of good-will in the tobacco business consists chiefly of what may conveniently be termed "brand value." At present nearly all manufactured tobacco, in whatever form, is sold under some special brand name. By means of extensive and skilful advertising, by a superior combination of qualities, or sometimes merely by some good fortune not easily explained, certain brands of tobacco have acquired a degree of popularity which gives them a marked advantage over other brands and which even under competitive conditions enables the manufacturer to realize a profit unusually high, and sometimes extraordinarily so. Demand for particular brands of tobacco is based peculiarly on individual taste or desire formed into a fixed preference. This preference may have been developed and fostered, of course, through various forms of advertising and other schemes and inducements by the manufacturer. It may not necessarily be due to any well-defined intrinsic qualities in the brands, although a permanent demand for a particular brand must be more or less based upon actual valuable qualities possessed by it. Brands of manufactured tobaccos in this respect are like many other so-called proprietary articles—patent medicines, perfumes, liquors, toilet preparations, chewing gum, etc.—the manufacturers of which may and often do make exceptional profits.

FUND ACCOUNTS

The caption, "sinking fund," or any other fund account, should always represent an asset, and inquiry should always be

made (whenever the nature of the undertaking causes the question to be raised) as to the disposition of this account.

Sinking Funds

In many mortgages, especially when secured by coal, ore, lumber, etc., it is provided that a certain amount, based on the production, shall be paid to trustees for the purpose of extinguishing the debt at or before maturity. These amounts properly appear as assets, on the balance sheet, and it should be clearly shown what investments have been made and what cash, if any, remains uninvested.

In theory this principle is not affected by the fact that some sinking funds, instead of being actual assets, are deductions from liabilities. For instance, a sinking fund may be used to buy up a corporation's own bonds. The actual condition is better expressed if the bonds so held (and which may be canceled) are deducted from the total outstanding bonds, rather than if shown as an asset.

A certificate from the trustees as to the state of the fund is sufficient evidence for the auditor, in so far as the examination of the cash and securities is concerned.

If the bonds have been surrendered to the company, the auditor should examine them and note whether proper safeguards are provided to prevent improper use thereof.

The creation of sinking funds and other points in connection therewith are discussed on page 284.

Conditions Imposed by Creditors.—In practically all cases of recent issues of preferred stocks and short-term bonds and notes, provision is made for the creation of sinking funds to retire all or a certain percentage of the stocks or obligations. Sometimes the sinking fund instalments are paid to trustees; in other cases the debtor corporations covenant to carry out the provisions. In the case of bonds and notes, any default may result in the entire issue, upon demand by a certain percentage of credi-

tors, being declared due and payable. Since preferred stock is not a liability there can be no enforced liquidation in the case of default, but other results, such as changes in the composition of the board of directors, may ensue.

The provisions vary with the ingenuity of lawyers and accountants; in each trust deed there are provisions which are intended to safeguard the investors in that particular corporation. In each case the auditor must secure a copy of such agreements, be guided by their terms, and use his own judgment in commenting upon compliance with, or default in, the terms.

Funds Representing Investments of Reserves

It is not customary to invest reserves in specific assets. Theorists feel strongly that an amount equal to a reserve account created for a specific purpose should be invested in first-class securities, so that it will be available when it becomes necessary to spend the cash required to make good the asset for whose replacement the reserve was set up.

The theory is tenable if the reserve represents the depreciation of a specific thing, such as a building or a ship, and if it is the intention to replace the building or ship after its usefulness has ended. But most buildings, ships, and similar assets are parts of general holdings and, with rare exceptions, more profitable use of the fund can be made in the purchase of new property or in extensions or additions to existing plant, than in the purchase of stocks or bonds of other enterprises. In fact, almost the only argument against the use in one's own business, of funds representing reserves is the temptation to expand beyond safe limits; but this depends not so much on the cash in hand as on the ability to borrow. In other words, the man who desires to expand usually does so to the extent of his borrowing limit, and it is futile to suggest to him the desirability of investing funds which represent reserves, in outside securities.

If an auditor finds that a fund exists representing investments of reserves, the securities in it and any income therefrom should

be verified in the usual way. If the amounts reserved are sufficient to accumulate to the desired aggregate without interest being added, any income realized from them should be credited to profit and loss; but if both accumulations and reinvested income are being relied upon to add to the fund itself, the auditor should ascertain whether the net income collected is sufficient for that purpose.

Fund and Other Permanent Investments

In this class are included the securities held for income purposes, or as investments of sinking, reserve, and other special funds.

The element of permanency arises from the purpose of the investments, i.e., they are neither bought and sold with a view to profit in their turnover, nor are they held as a temporary reserve to be instantly converted into cash.

In many instances the market price at a particular date may be fixed by a few small transactions which have little bearing on actual values, owing to the limited demands, and perhaps to an urgent necessity to sell on the part of an unfortunate investor. The proper plan of valuing bonds purchased for permanent investment is to compute their value on the basis of the effective, or actual, rate of interest, if held to maturity. The basis to be used is the prices at which they were originally purchased.

Bonds are rarely purchased at their par or face value. To make the amount of the purchase equal the par value at maturity requires an adjustment of accounts. The scientific method of adjustment is known as amortization or accumulation and involves a debit or credit to interest account at each periodical adjustment of the book value, in accordance with the effective rate of interest, on the basis of which the investment was made.

The corporations in whose balance sheets marketable investments play a leading part are: insurance companies, banks (more particularly savings banks), and trust companies. State laws require that the solvency of insurance companies be tested by the

adequacy of the assets (valuing stocks and bonds at the market prices) to meet the present value of policy contracts in force and sundry other liabilities. Owing to the abnormal decline in the market values of securities in the fall of 1907, and again at the end of 1920, the statements of almost all the life insurance companies as at December 31, 1907, and 1920, showed startling decreases in surplus as compared with their statements as at the close of the preceding years. This shrinkage attracted considerable attention, and, since the corporate bonds owned (the fall in whose market quotations was largely responsible therefor) were yielding the same rate of income as when purchased, there was no serious question as to the security of the principal of most of them, and as they were purchased to be held until maturity, emphasis was given to the question, whether the basis of so-called market value was not erroneous. These object lessons have resulted in a more general appreciation of the advantages of amortization. A professional auditor should be fully conversant with the principles of amortization and should recommend its adoption wherever conditions warrant it.

In preparing a balance sheet which is to show investment securities at their amortized values, it is interesting and advisable to mention, in a footnote or other suitable place, the market values as at the date of the balance sheet.

If securities are purchased for a definite purpose, such as the creation of a fund to retire maturing obligations, the questions of income and of amortization are both important. In all cases the auditor should secure a copy of the board minutes or trust deed provisions which govern the setting aside and handling of the fund. Any variation therefrom may be important and should be fully investigated.

If the balance sheet does not disclose the fund properly, the auditor must insist on its correction. Many corporate officers neglect sinking fund and similar requirements if the trustee fails to inquire periodically into the transactions of the corporation. When their omissions are called to their attention, they point out

the excellent financial condition of the company and argue that the provisions are intended merely to safeguard the bondholders from loss in case the company should be unsuccessful, but, since the contrary is the case, there is no necessity for bothering with the setting aside and investing of a sinking fund.

Many bonds are secured by mortgages on personal property. Failure to observe trust deed requirements occurs most frequently where there is a sale of a part of the property pledged under a mortgage. When obsolete or worn-out property is sold, all proceeds of such sales are the property of the trustee. Any use thereof by the corporation is conversion.

Therefore, wherever an auditor finds that there has been an issue of bonds, he should obtain a copy of the mortgage securing the same, examine its provisions, and note any failure to observe them.

It may be that resolutions can be found in the board minutes requiring the investment of part or all of the surplus in specific securities. The requirement will not be difficult to verify.

Bonds and Mortgages

Bonds secured by mortgages upon real estate should be carefully examined, as well as the other papers usually filed with them. Formerly such bonds were double the face of the mortgage, the reason being that the mortgage itself could not be converted into anything but the real property itself, thus leaving accrued interest, taxes, expenses of foreclosure, etc., unprovided for. By requiring the mortgagor to execute a bond in a sum sufficient to cover all such amounts, the result was accomplished. The present practice is to write the bond for the same amount as the mortgage. Provisions protecting the mortgagee for interest, costs, etc., are inserted in the bond. The mortgage should bear evidence of recording on its face and should appear to be regular as to signature, etc., and in a general way should be identified with the description contained in the schedule of assets.

Insurance and title policies should be submitted, and as a rule accompanied by certified appraisals by disinterested experts. If

the mortgage is for a long term, a recent appraisal should be found. As to renewals, a new appraisal should be secured unless good reasons appear to the contrary.

Instances are known where canceled or fictitious mortgages have been submitted as outstanding or genuine. A clever forger can manufacture documents which will deceive those more familiar with such papers than is the average professional auditor. Fortunately, it is not often attempted. The scrutiny by the auditor of all the papers and correspondence usually accompanying mortgages, and the verification of the original purchase, and collections of income and principal, should disclose any irregularities. The verification of balance of principal should be made by direct correspondence with the borrower unless the client does not wish such confirmation made, in which case the auditor should qualify his report accordingly. The auditor should ascertain that paid tax bills have been submitted to the mortgagees.

TREASURY STOCK

When stock is issued fully paid and is returned to the treasury of the company which issued it, through purchase or gift, it is known as "treasury stock." In verifying the existence and location of treasury stock the same rules should be observed as in case of other securities.

If the state law permits the holding of treasury stock, the acquired stock may be reissued. If the state law prohibits holding of treasury stock, the acquisition of the stock automatically effects a reduction of the capitalization and the stock cannot be legally reissued.

In states where the right to hold treasury stock is doubtful donated stock is sometimes placed in the names of trustees to be held by them subject to the order of the board of directors.

If purchased by the corporation for resale, cost price is the correct basis of book entry; if purchased without specific intention to resell and more than par is paid, the premium should be charged to surplus. In effect, part of the surplus is paid to the

retiring stockholder. The par value of the stock purchased should be deducted on the balance sheet from the total stock issued. When the cost is less than par, the purchase price should be carried in the books and in the balance sheet as an asset, but the item must not be included among any other assets. It is desirable that the number of shares should be stated. It is information which should be revealed. Many published balance sheets do show all details, but the practice is not uniform.

If acquired by gift, opinions differ as to the form of entry. Because of the legal formalities required to show that the stock has been issued full-paid, the best authorities sanction the setting up of the stock as an asset at par value, offsetting this entry by the creation of a reserve or surplus account which is designated as a capital item, and which is clearly differentiated from the surplus which arises out of profits or which is available for dividends.[2] It is never proper to include any part of the book value of treasury stock among the current profits or as a part of the surplus available for dividends. This does not apply, however, if stock had been resold at a profit and the profit is realized in cash. As treasury stock is sold or otherwise disposed of, the asset account is credited and an adjustment is made between this account and the reserve or surplus account for the difference between the book value and the proceeds of the sale.

It would be more accurate to enter donated stock as a credit at par to the property or other asset account which was debited when the stock was originally issued, and to debit treasury stock. In setting up the accounts on a balance sheet, treasury stock would be deducted from the total stock issued. If any stock is sold at par, no adjustment is necessary; if sold for more than par, the premium received should be credited to capital surplus; if sold for less than par, an account called "discount on capital stock" should be debited. The foregoing procedure is not feasible under the corporation laws of states which require stock to

[2] For a full discussion of treasury stock, see *Accounting—Theory and Practice* by R. B. Kester.

appear as full-paid. Entries which negative this showing should not be made without the approval of competent legal advisers. Fortunately, "no-par" value capital stock can now be issued in many states and the necessity for padded book entries is obviated.

In the case of no-par value shares properly issued and donated to the corporation, treasury stock should be debited for $1 and capital surplus credited. Any cash realized from sales should be credited to capital surplus, unless the stock originally was issued for property and the property was overvalued, in which case the credit should be to the property account.

When no-par value treasury stock is acquired at a price less than the original issue, some authorities state that surplus should be credited with the difference between the purchase price and book value. If original book value was $40 per share and 1,000 shares are purchased at $30 per share, surplus would be credited with $10,000, under the theory that original values should not be disturbed. The simplest method is to carry the stock at cost. Nothing has happened to justify a credit to surplus; on the contrary the only change in the situation is that someone is willing to sell stock at less than book value, thus discrediting asset valuations. An accurate reflection of the transaction (if the books are to be readjusted) is to reduce the original property values. When sales have been made by a seller under compulsion to sell for reasons not connected with the company whose stock he is selling, it cannot be said that values are discredited; where there are willing sellers as well as willing buyers, it is assumed that consideration is given to book values.

When no-par value stock is purchased at more than original issue price, surplus is in fact depleted and surplus account should be debited. As the capital is being reduced, it is proper to debit capital surplus with the excess.

Unissued Capital Stock

This should be distinguished from treasury stock. Good accounting practice does not require any entry therefor in the

books of account until it has been subscribed for. There is no objection to making a statement regarding the authorized and unissued stock in a balance sheet, but it should appear under the caption "Capital Stock" and not on the asset side of the balance sheet.

WASTING ASSETS

Certain assets, such as mines, lumber, etc., are in a sense both current and fixed in their nature, but almost invariably a considerable degree of permanence attaches to them, and, since their conversion into cash is a very gradual process, such assets should appear as a subdivision of those which are known as "fixed."[3]

Values to be Written Down

It is obvious that a mine or a tract of timber from which ore is being taken or timber removed is worth less at the end of a fiscal period than at its commencement. Consequently the balance sheet valuation should be reduced in direct proportion to the depletion of the mine or the cutting of the timber.

There is, however, a decided difference between the necessity for providing for the renewal of plant and making good the diminishing value of a mine. In one case it must not, and cannot, be assumed that there will be no new machinery to buy, whereas the owners of a mine expect that the product thereof will be converted into cash and become available for distribution as dividends, unless they decide to retain the proceeds and invest them in other ways.

In such cases the law does not prevent payment of dividends out of capital, but the by-laws of the board of directors of a cor-

---

[3] The valuation and depletion of wasting assets has required special attention in tax matters. Those desiring detailed information regarding the valuation and depletion of mines, oil wells, timber, and other natural resources, will find an exhaustive treatment in *Income Tax Procedure*, 1921, page 923 *et seq.* Also see Volume II of this book for special points in the audits of these enterprises.

Also see *The Taxation of Income from Natural Resources*, by R. V. Norris, in *The Federal Income Tax*, Columbia University Lectures, 1921.

poration may prohibit it. The auditor must acquaint himself with the facts of each case.

The usual method of calculating depletion is to take the purchase price or appraised value and divide it by the estimated number of units of quantity to be extracted. This calculation gives the estimated cost or value of each unit. The quantity extracted in any stated period is multiplied by the amount ascribed to each unit, resulting in the total depletion allowance for the period. From the standpoint of a simple arithmetical calculation, the method has much to commend it. It should not appeal to those who put conservatism and expediency above accurate accounting; since the exact quantity, the time, and costs of extraction are all estimated, conservatism and expediency are not served by using the same rate for each unit extracted during the first year as during the twentieth or fortieth; conservatism (not accuracy) calls for heavier allowances during the early years than during the uncertain later years. It does not appeal to those who contend that under a correct method of computation the net charges are less during the early years than during the later years. Many wasting assets are purchased on careful estimates of quantities, life, and values; the gross figures are reduced to present worth; the calculations are available so that accurate accounting should reflect the details of the transaction rather than to take the average. The average method is erroneous because it ignores conservatism, which calls for heavier allowances during the early years. It ignores the actual basis of the transaction which reflects the constantly reducing cost of carrying the investment. Interest is an actual factor in arriving at present worth, and under accurate accounting the gross purchase price would be set up and depleted, and the discount would be set up and amortized.

When a flat purchase price paid as a result of bargaining, or an appraisal, is not based on definite gross figures reduced to present worth, the rough and ready average basis is about as satisfactory as any other, provided the total quantity and the life are understated as much as good practice permits.

This rough and ready method, however, does not produce the rate of return on investment which is expected. When a coal mine costs $100,000 and is estimated to contain 1,000,000 tons of coal, under the usual method of depletion 10 cents a ton is set aside or reserved for each ton mined. If 100,000 tons are mined each year the annual depletion allowance is $10,000. If the net profit is 20 cents a ton after the depletion charge and excluding income from the investment of the fund representing the reserve, the profit per annum is $20,000, or 20 per cent on the original investment. If all of the profits are distributed and if the depletion reserve is invested at 5 per cent per annum, the additional net income is $500 the second year, $1,025 the third year and an increasing *amount* thereafter. If both the net profits and the depletion reserve are distributed, there is an increasing *rate* of return each year because of the decreasing net investment. During the tenth year the investment is $10,000 and the net income is $20,000 or 200 per cent on the investment, as against 20 per cent the first year.

This illustration proves that the usual method is inaccurate, unscientific; nor does it reflect the intention of the investor. When the original investment was made it was expected that under continuing relative costs of mining and sales prices the annual rate of return would be the same. Instead of the depletion reserve being the same each year, there should be taken into consideration either the decreasing investment, or the income from the investment of the depletion reserve. On a 5 per cent basis the depletion allowance is $7,950.46 per annum instead of $10,000. Adding the annual income from the investment of the fund representing the reserve to the operating profit, the owner will realize the same total profit each year.

When a purchase is made on the basis of the present worth of agreed-upon future extraction, it would seem that the proper periodical entries thereafter are merely reversals of the detailed items used in the original computation; the procedure proposed, however, is not in use.

1. Mines.—The auditor should follow the suggestions relating to land (page 181) so far as title and encumbrances are concerned.

In verifying the accuracy of the value placed upon mining property the auditor as a rule does not have much to guide him. He must, however, keep in mind the fact that as operations proceed value decreases unless development and exploration work disclose new values. An analysis of the original cost, taken into consideration along with the engineer's estimates of total contents, is a valuable check on the allowance for depletion. It may not be customary to submit the engineer's records to the auditor, but the latter is on notice that no well-managed mining company attempts operation on a large scale unless fortified by the scientific calculations of skilled engineers. In recent years many valuations have been made for federal tax purposes. With these before him and with the records of production as shown by the books, an auditor can arrive at a reasonable conclusion as to how the book valuations have been estimated. If his own figures vary much from the books', the auditor should investigate further.

2. Timber Land.—It is assumed that all timber propositions which have arrived at a stage where an audit is in order are conducted on a well-thought-out plan. The quantity of standing timber will have been estimated and verified (cruised) and, with this as a starting point, the auditor can estimate the average depletion charge to be made.

Obviously any attempt to certify to results based on an examination of money values is extremely hazardous. The books should show quantities as well. If they do not, the auditor should regard them with suspicion.

3. Oil Wells.—The rules for determining values of other wasting assets are not applicable to oil wells. The original or "flush" flow is no criterion of the settled flow except in a few fields. In no case is the life of a producing oil well known. The auditor who examines the accounts of an oil company for the first time should study some of the exhaustive special information which is

available. Nearly all of the leading companies issue annual reports containing details of operations and valuations. With these as a guide no more difficulty will be encountered than with other audits.

CONTINGENT ASSETS

Contingent assets are those which have not been reduced to definite money values; if shown on a balance sheet they are not included in the aggregate valuation of the assets. In nearly all active business concerns claims exist which are in dispute. Taxes may be overpaid, damages may be claimed for infringement of patents or for failure to fulfil the terms of contracts. A general inquiry will usually develop items of this nature. When important enough, mention thereof should be made on balance sheets.

The auditor rarely discovers any trace of assets the accounts of which have been omitted from the books, but occasionally he is fortunate enough to disclose tangible assets which, if properly applied, increase the net worth of the business under audit; for instance, doubtful accounts written off; securities deemed worthless; and judgments not finally awarded, which may become valuable. The author knows of one instance in which a company secured a judgment for $33,000 for damages against another solvent company. The item did not appear as an asset upon the books. Two appeals were taken and won, and after a final favorable decision the claim was paid with interest and costs. The company's capital stock is $10,000, so that the collection of the judgment materially changed its financial position.

Capital Stock Calls and Assessments

In some states a statutory liability exists on the part of stockholders in business corporations for an amount additional and equal to the par value of the shares. This corresponds to the liability of stockholders in all national banks and in some state banks and trust companies. If the possibility of such recovery exists, it is an asset which should be taken into consideration.

The credit of a company incorporated in a state having such a law should be strengthened thereby, particularly if some or all of its stockholders are of recognized financial standing. It is not customary to show the statutory liability on balance sheets although it is useful information. The auditor should acquaint himself with the facts and consider the advisability of mentioning it.

In other cases the auditor may find that the capital stock has been only partly paid and that the uncalled instalments are neither charged to the stockholders in the books, nor mentioned in the statements. This occurs if the corporation is a close one in which officers and directors are identical. The amount callable should be ascertained and the probability of collection should be duly considered.

Liabilities of Directors

In many states directors are personally responsible for debts contracted under certain circumstances or in excess of certain sums. If there is any possibility of such contingencies, the auditor should refresh his memory as to the laws governing corporations of the state in which the company is incorporated, or in which it has its principal office, and ascertain whether or not the directors have automatically made themselves responsible for any part of the indebtedness. This is especially important if an examination is being made for creditors.

SECRET RESERVES

After all recorded assets have been considered, and after due attention has been given to any assets which have been inadvertently or fraudulently omitted from the records, it may be necessary to determine why assets have been intentionally omitted from the books or the balance sheet, or both. These are exclusive of "contingent" assets which are discussed on page 213. Assets may exist and may be known to everyone connected with an enterprise, but instructions from an executive source may result

in the entire omission of such assets from the published reports of the concern's financial standing, and the assets may not appear on the books of account. Or there may be obvious undervaluations which, after being so carried for a number of years, are suddenly written up to their actual value.

How Secret Reserves Are Created

As a matter of fact, the auditor does not find a great many instances of secret reserves, but, if he represents stockholders or others who are interested in knowing the full value of the assets, he should consider the possibility of the following improper treatment of accounts or assets:

1. *Systematic concealment of additions to plant or equipment through charging the cost thereof to maintenance instead of to asset accounts.*

This practice must be clearly proven, because it is not intended to condemn unreservedly the occasional charging off of plant additions if the obvious purpose is to be conservative, and if cost is not a material factor in the operations of the period. But if it is evident that a considerable sum has been expended on improvements and if there is no reflection thereof in the accounts, the auditor should insist on restating the accounts and should bring out clearly the actual earnings of the period even though a special reserve is set up for the amount not previously capitalized.

2. *The creation of excessive reserves for depreciation, bad debts, or similar items, unless the fact that the reserves are excessive is expressed on the face of the balance sheet.*

This is, perhaps, the favorite method of deceiving minority stockholders when the directors or other insiders wish temporarily to understate the earnings as well as the assets.

It is not intended to condemn at this point the practice of setting aside what may appear to be excessive reserves to provide for probable losses. In such cases, if the reserves are officially created, the auditor can hardly object to the presentation of the accounts as they appear on the books.

The auditor is so accustomed to these reserves being insufficient that he feels reluctant to criticize liberal allowances, unless there is an apparent desire to defraud innocent stockholders. Otherwise, he commends the disposition to be conservative, and watches with interest the final outcome of the reserves.

3. *Inventories should reflect fair values (as explained in Chapters VIII and IX), but there is a limit beyond which valuations cannot be reduced, unless the circumstances of the reduction are stated on the face of the balance sheet.*

This rule is of somewhat greater importance than the preceding one, because reserves stand out to a certain extent and grossly excessive reserves are apparent; but if an inventory is undervalued, anyone unacquainted with the fact is not able to detect the fraud, no matter how carefully the balance sheet is analyzed. If there is an honest desire to be ultra-conservative and to write something off the inventory after it has been properly valued, it should be accomplished by creating a "reserve for possible loss on realization of inventory" and setting up this reserve on the balance sheet, with a footnote stating that the inventory itself is not excessive.

If those responsible for balance sheet valuations wish to write down the inventory, but do not wish the fact to be reflected in the balance sheet, the auditor is put on notice that an attempt is being made to deceive someone. The lack of a good reason for concealing the truth is prima facie evidence of dishonesty and the auditor should act accordingly.

4. *The circumstances surrounding the writing down of assets must be carefully looked into.*

So many assets are overvalued that it is usually refreshing when an auditor discovers a willingness to write down overvaluations out of profits. Instances are known, however, where such adjustments have been so stated as to conceal their true import and minority stockholders have lost thereby.

In all cases the full earnings of a period should be shown, and if it is desirable to write off assets, such as good-will, or to write

down overvaluations, such items must appear as extraordinary deductions and not as applicable solely to the period under review. If the accounts are so stated, no fault can be found with them. A stockholder who does not understand accounts may look at the final figures and form an erroneous conclusion as to the actual profit of the period, but, if there is no attempt to deceive and if the accounts are clearly set forth, the stockholder is simply suffering the penalty of his ignorance.

Reasons for Undervaluations.—There does not appear to be, from an accounting standpoint, any justification for flagrant undervaluations under any circumstances; but since the practice has supporters among some very reputable financiers, it is at least in order to examine the arguments used in support of secret reserves. The principal argument is that stockholders are notoriously hungry for dividends, and that a surplus available (in their opinion) for dividends, but not so distributed, reflects no credit whatever on the management, but quite the contrary. On the other hand, if the profits of the good years are all divided so that when the inevitable poor year arrives the dividend must be passed, there is bitter criticism. Some boards of directors think that stockholders as a class must not have full information, for their own good; therefore, in order to avoid criticism, the profits of the good years are not fully disclosed and dividends are continued through the unprofitable periods.

Banks and trust companies assume this patriarchal attitude more frequently than do industrial corporations. Perhaps there is some justification for this practice on the part of banks whose stockholders are rarely changed and whose dividends are largely depended upon for living expenses.

With respect to the banking house and equipment, there can be little if any objection to writing down their value to a nominal amount. Except in a few localities, bank buildings and bank furniture are not assets which can be realized upon to pay depositors. The building occupied by a failed bank is not an attrac-

tive place for another bank to start business in, and it is rarely suitable for anything else. It may be proper, therefore, for a bank to write down its property account to the actual value of the land and the auction value of its furniture, vaults, etc. This is a secret reserve on the basis of a going business; but since banks publish frequent statements of their assets, no one who owns stock and who desires to ascertain the book value of the stock need be deceived.

Of course, if a bank's premises are also occupied by tenants who pay remunerative rentals, this fact should be taken into consideration in writing down the book valuations. It might be fair to assume that, if a sudden demand for funds were made and it became necessary to sell the building, a price could be immediately realized which would represent the capitalized valuation of the property, assuming that the bank's own quarters would not yield any return.

Limitations on Undervaluations.—There are few, if any, other classes of enterprises where there is any justification for writing down the cost or value of assets in order to provide a secret reserve to be held in abeyance to pay dividends on a constant basis. The stockholders of industrial corporations do not have as good an opportunity of forming an opinion upon published balance sheets as do the stockholders of banks. They must rely on the accuracy of the amount which is reported as the net income for the period. Such stock changes hands more frequently than bank stock.

It is apparent that a stockholder who desires to sell and who fixes a price upon his stock based upon the reported earnings of the last period is at a great disadvantage as compared with a prospective purchaser of his stock who knows that the full earnings were not disclosed by the report, and that a part of the profit was diverted to a secret fund which it was proposed to use subsequently to bolster up an unusually unprofitable period.

It has been argued that good faith on the part of the manage-

ment should be the sole test of whether or not such transactions are acceptable enough to a professional auditor to warrant his certifying to a balance sheet and income account in which they appear.

THE AUDITOR'S POSITION.—An auditor can give advice, but he cannot control the action of a board of directors, nor in this country does he often communicate directly with the stockholders of a corporation. What should he do when he is asked to certify to a statement which he believes contains all of the facts and figures which the board of directors, acting for the stockholders and for their interests, think they should have, but which conveys a false impression because the profits are understated owing to the creation of a secret reserve?

The auditor who finds himself in such an uncomfortable situation has but one course to pursue; he should send in his report setting out the true facts as he has found them, and commenting upon the asset valuations of which he cannot approve. The directors cannot publish the report unless the existence of the secret reserve is disclosed. If they do not publish the auditor's report, but put out an uncertified balance sheet, the auditor can do nothing.

It might not be a bad idea to urge every stockholder proposing to sell his stock to call for a professional auditor's report upon the accounts and affairs of the corporation before the sale is consummated; but, unfortunately for professional auditors, the value of their certificates is not yet appreciated by the majority of investors. When a man buys a horse he wants it examined by an expert on horses; so he calls in a veterinarian. The man knows less about accounts and values than about horses, but he does not think of calling in an expert on values or accounts when he buys or sells a share of stock. He has heard about the value of the services of a veterinarian since his childhood, but he does not know that the absence of an auditor's certificate from a balance sheet may indicate that the assets shown therein are improperly stated,

and that if he decides to sell because the business does not appear to be as prosperous as he thought it would be, his action is exactly in line with the intention of the insiders, who promptly buy out all those who have become discouraged.

The fact of the matter is that an auditor is taking big chances when he passes a balance sheet which conceals or understates assets. Good faith may be only apparent, the real purpose of the management being to buy the interests of the misinformed.

In no event, however, should an auditor certify to a balance sheet from which any asset has been omitted entirely. The arguments in favor of an undervaluation are weak enough, supported as they are by the general assertion that the item speaks for itself in the balance sheet; but there can be no argument at all to support the complete omission from the asset side of the balance sheet of any item of property, tangible or intangible, which has or may have a market value.

The auditor who knowingly certifies to such a statement can be held responsible, and money damages can be recovered from him by any stockholder parting with his stock on the basis of the balance sheet figures. Such an action can be founded on a charge of deceit or fraud depending upon the circumstances of each case.

CHAPTER XII

BALANCE SHEET AUDIT—LIABILITIES

In a balance sheet audit nothing is more important than to ascertain whether or not all the liabilities appear and are properly stated.

At the outset of this chapter it may be proper to illustrate this point in order that the auditor may realize the importance of placing himself in the position of the one who reads the balance sheet later.

Information Bankers Require

Bankers extend credit to trading concerns, not to furnish additional capital, but to assist them to carry stock-in-trade, or accounts receivable, at their busy season; and they expect to have the borrowings repaid or materially reduced *during* the dull season. Therefore the balance sheet of a trading concern is always scanned closely by the banker to determine the proportion of current assets to current liabilities, and he calculates the time within which the stock-in-trade should be realized upon. It may be that the concern has contracted to purchase large quantities of goods which have not been received and these contracts may call for large cash payments within a comparatively short time. Furthermore, the contracts may have been made on a declining market, and the goods to arrive may cost more than would have been the case if not contracted for in advance. This information does not appear on the regular books of account, but is it not the kind of information which the banker requires to enable him to make up his mind in passing upon the desirability of the risk, and is it not the kind of information which an auditor should seek in order to be of substantial value to his client?

Position of Auditor

The auditor who limits himself to an examination of the formal books of account in making an audit is preventing himself, in many cases, from being of constructive value, and in other cases he is approaching the limits of liability in money damages for negligence in not doing all that a skilful and experienced auditor should do. It is conceded that when an auditor assumes to pass on matters which are not in the books he is opening up a wide field, perhaps a troublesome one to cover; but it may as well be admitted that the ordinary so-called checking of books, and the subsequent balance sheet prepared therefrom, are about as valuable to the banker or other creditor as the information which the borrower can and does furnish himself.

Determination of Liabilities

In the audit of assets the element of opinion is an important one. Values depend on estimates; estimates are based on opinions and the exercise of judgment. In the audit of liabilities the element of opinion is negligible because most liabilities are fixed and definite in amount.[1] There may, of course, be contingent liabilities, such as unfavorable open contracts and lawsuits, but these items are usually susceptible of verification. The chief difficulty regarding liabilities lies in their ascertainment; there is no such difficulty in determining the exact amount of a liability as there is in the case of any assets other than cash. An account receivable believed to be good is frequently bad; the entire aggregate of accounts payable (in a going business) must be paid in full.

The items on the liability side of the balance sheet which must be determined are few in number. Some hold that the term "value" or "inventory" is not properly applicable to lia-

[1] "The accounting problems having to do with liabilities are extremely simple as compared with those relating to assets. This is principally due to the fact that the question of valuation, so perplexing in regard to assets, practically disappears when liabilities are concerned." (Henry R. Hatfield, *Modern Accounting*, page 185.)

bilities;[2] others hold that the word "inventory" may be applied to liabilities.[3] Irrespective of terminology, all liabilities which can be determined should appear in the balance sheet.

Distinction Between Liabilities and Capital

Exclusive of reserves there are three classes of items on the credit or right-hand side of the balance sheet, viz., (1) liabilities, (2) capital, and (3) items which are liabilities or capital, depending on circumstances.

The effect which the application of certain items may have on the financial statement of a concern and its virtual solvency or insolvency in relation to general creditors, is indicated by the illustrations stated below.

In some cases credit balances may appear in the statement as capital when they are actually liabilities. In other instances such balances may appear as liabilities when by reason of having been subordinated or for other causes they are really capital.

It seems almost incredible that such should be the case but it is true. In one case a corporation on its books annually credited

[2] "To the liability items of the balance sheet, principles of valuation are not directly applicable as such, except so far as content or inclusion and measure of quantity or amount may be said to embody considerations of valuation." (R. B. Kester, *Accounting—Theory and Practice*, Vol. II, page 97.)

"The principle of showing the full truth as to the liabilities raises the problem of the complete inclusion or inventory of the liabilities. Under this will be considered any adjustments that must be made in the book record in order to show the true state of the liabilities, and also the proper treatment of contingent liabilities so as to show their relation to the state of the business." (*Ibid.*, page 342.)

[3] "In addition to the asset inventories discussed in the foregoing section, there are also liability inventories. The purpose of such inventories is also to equalize charges over two or more accounting periods. For example, at the end of a given accounting period it may be noted that a certain portion of the year's taxes have accrued but have not yet been paid. Suppose experience shows that the year's taxes will be $120, payable at the end of the tax year. The period for which the tax will be assessed may not coincide with the concern's accounting period; wherefore, part of the $120 is chargeable to one accounting period and the balance to the next. . . .

". . . . If such asset and liability inventory adjustments are not made at the end of an accounting period, it is clear that the accidental circumstances of payment or non-payment of cash will affect the profits of the period either favorably or unfavorably. Either is undesirable, since a distorted and untrue picture of affairs of the business is thus given." (Stephen Gilman, *Principles of Accounting*, pages 49, 50.)

all of its earnings to the personal accounts of its stockholders; the latter dealt with the book credits as dividends received, and paid income taxes thereon. In all published balance sheets and in statements to mercantile agencies the stockholders' credit balances were shown as surplus—not as liabilities. The capital stock was $10,000; the so-called surplus was $800,000. It was held that the stockholders did not rank as creditors. In many cases debts due to stockholders are specifically subordinated to the claims of all creditors past, present, and future. In other cases securities are issued which on their face are debts but which are so restricted in their remedies that they should be classed as capital. Assessments paid by stockholders, carried on the corporation's books as loans, will be held to be capital if the facts disprove the entries on the books.[4] In the case of an issue of so-called debenture bonds, the maturity date is 1990; interest is payable only when declared by the directors and is not cumulative; by express language no claim can be made for principal or interest at any time when there is any obligation, direct or contingent, to others. The holders of the "bonds" are creditors only so far as the stockholders are concerned. The full amount shown to be due to the "bond" holders is at the risk of the business and ranks as capital so far as creditors and prospective creditors are concerned. These conditions illustrate the third class mentioned above.

Subordinated Debts.—The purpose of the subordination of obligations is to protect creditors and to improve the financial showing of the concern affected. Auditors are competent to pass upon the general features of subordination agreements, but when there is any doubt, and when such questions as publication and recording arise, the opinion of lawyers should be secured. When the fact of subordination is established, full effect must be given thereto in the balance sheet, otherwise

[4] For numerous rulings on specific cases in which the distinction between capital and liabilities is fully discussed and passed upon by the Treasury, see *Excess Profits Tax Procedure*, 1921.

most and sometimes all of the intended effect will be lost. The inclusion of subordinated items in accounts payable, even though an explanatory note appears, is not the proper form of statement; subordinated claims or debts should be separately stated immediately preceding capital items. In the case of general partnerships there can be no liability to any partner. So-called loans from the partners are not debts; for the purpose of interpartnership accounting they may be so treated in the books of account, but in published balance sheets all of the partners' accounts, *debit* and *credit*, should be merged in one, and set up as the net capital of the partnership.

In the case of so-called limited partnerships the relationship of debtor and creditor between the partnership entity and individual partners may or may not exist, depending on the facts and on state laws.[5] If the subordination is of a temporary character the limitation should be clearly shown. In one case it was contended that an agreement to subordinate the debt due to a large stockholder might be withdrawn at any time, and new creditors might lose the benefit. The author suggested that the subordination agreement be made irrevocable and lodged with one of the federal reserve banks. The suggestion was found to be feasible and was adopted.

Accounts Payable

The term "accounts payable" includes all debts and obligations due and not due which are not evidenced by notes, bonds, acceptances, or other specific promises to pay which in themselves recognize the debts due to others. The term includes all debts due on open account for operating and capital purposes as well as for accrued expenses, interest due or accrued, and taxes due or accrued; accrued items are usually grouped under a separate caption called "accrued liabilities." As a separate item there should be included amounts received in advance for

[5] For discussion of this point, see *Income Tax Procedure*, 1921, page 626 *et seq.*

goods not shipped, advance rentals, and items for similar purposes. It may be that cash is not to be paid in respect of these items, but it must be assumed that the accounts will be liquidated in due course by the transfer of goods, services, or adequate consideration. When it is known that payment in cash or other property will not be made within a year, long-time obligations may be separated. In arriving at net current assets, long-time liabilities need not be deducted from the gross assets.

The ideal course by which to satisfy one's self that all obligations to trade creditors appear in the books at the balance sheet date would be to read all the incoming mail for some days before and after such date. The period prior would yield information as to the original invoices for purchases, and during the subsequent days ordinary monthly statements, followed later by polite requests to pay, show practically all of the class of debts mentioned. The mail likewise brings notices of maturities of promissory notes.

Unfortunately, the auditor rarely has an opportunity to open the mail of his clients, although it might shed light on more items than accounts and notes payable. In the absence of this short-cut an auditor must first see to it that all the accounts payable shown on, or indicated by, the books are reflected in the balance sheet, and, second, he must conduct a proper investigation to ascertain whether any accounts payable actually owing by the concern under audit and not shown on the books, should be included among the liabilities. The procedure in such an investigation is explained hereafter.

Proper Classification.—The auditor cannot foresee the use to which a balance sheet may be put, so that it is always his duty to use plain terms and so to classify the liabilities that any pertinent question which arises in the mind of an interested person may be answered without the necessity of a special examination for each question. It is not enough to state the aggregate of the

debts of a firm or corporation, unless it is to be understood that all consist of open accounts payable, incurred in the regular course of business, not due, and for which value has been received. If various classes of debts, incurred in other than the regular course of business, are included in one sum, it is impossible for anyone not familiar with the facts to express a reliable opinion upon the financial position of the concern.

For instance, it may appear that a firm has assets amounting to $1,000,000, consisting chiefly of accounts and stock-in-trade, and has accounts payable amounting to $250,000. If the latter are not due it is fair to infer that the accounts receivable and merchandise stock can be liquidated quickly enough to pay the obligations as they mature. But suppose it is shown that some of the accounts payable are long overdue; that the accounts receivable are very slow; that the merchandise stock is selling poorly; and that cash receipts are being used to pay wages and similar expenses. Does this make a favorable showing in the eyes of a banker who may be considering the advisability of extending a line of credit?

Of course a firm in such a condition may deserve the confidence of a banker, and there may be ample security for a reasonable line of credit, but no auditor is justified in merely stating the bald facts as shown. If the auditor does not feel warranted in adding a few words of comment to convey unequivocally the fact that the assets are not readily realizable and that the accounts payable are long overdue, then his point of view is too far apart from the author's. The auditor whose conception of his duty is that it requires him to state so-called facts only, is not performing useful professional services. The principal reason why some business men feel that professional auditors cannot help them is that they have been unfortunate enough to hear the words and see the figures compiled by an auditor who felt that he exceeded the limits of propriety if he ventured an opinion upon any important item of the balance sheet.

ITEMS OMITTED.—It is a reasonable assumption that no balance sheet prepared within, say, twenty days of a certain date, exhibits every liability as of that date. No exception is made of those concerns which maintain an inflexible order system and whose books are not closed until every order issued is represented by a purchase invoice. It is always found that someone has ignored the rules and ordered something for which a liability exists, and it may be that a liability has been incurred for an expense which does not require an order, such as long-distance telephone calls or lawyers' bills. Taxes concerning which little is known may be accruing, or goods may not have been delivered to a customer because he has refused to accept them, and return freight charges and storage may have accrued. The best the auditor can do is to schedule all of the liabilities to which he can find the slightest clue.

So many balance sheets are issued which fail to include all liabilities that the author feels justified in discussing the matter fully, in order that the student may have the benefit of accumulated experience.

Trade Creditors

This may not be the largest item of the liabilities, but it is clearly the most important to verify. The notes payable outstanding may be larger in amount, but the proceeds thereof were presumably used to discharge trade debts, so that the latter item loses none of its importance because the balance is small.

As already stated, an auditor may ascertain the total amount of the debts by examining all of the mail over a sufficiently long period, but if this procedure is out of the question, he must do the next best thing.

CREDITORS' STATEMENTS.—Statements from creditors are valuable in verifying the amount due or claimed to be due, and, if the time permits (it usually does not), the auditor can do no better than to request a statement from everyone with whom the

concern may be expected to do business. Even then someone from whom a purchase had been made may be forgotten and the invoice may be omitted from the books, and the fact concealed from the auditor.

Several cases have come to the author's attention of defalcations which arose through the changing of the names of the payees on cheques and the inserting of the name of the defaulter. In such cases it is quite possible that a request for statements from creditors and a comparison of such statements with the ledger accounts would have brought to light the defalcation.

Suppressed Invoices.—Most concerns keep order and receiving records of some description. The auditor should compare the entries in these records during the period immediately preceding the balance sheet date, with the purchase journal or voucher record, to ascertain if the purchases indicated are entered. All entries need not be checked. It is necessary to test only enough of the work to satisfy one's self that no invoices have knowingly or unknowingly been suppressed.

If an audit is not completed until more than a month has elapsed after the closing date, the voucher record should be scrutinized to ascertain whether invoices entered subsequently belong to the prior period.

Irregular Items.—The open accounts on the ledger should be compared with the schedule of accounts payable. It should be ascertained that the balances represent specific and recent items only. If not, why not? Where any account does not look regular in every way, the creditor's statement should be asked for. If it cannot be found, request a duplicate. If told that the creditor does not send statements, *demand* that one be procured. The latter excuse is often made, but almost invariably it follows an inquiry relative to a disputed account and the ledger shows a less amount to be due than is claimed. Nearly all business houses do send statements either on a fixed day each month or as bills fall due. The author has never heard of a

refusal to furnish either a duplicate or a memorandum of the amount due at any stated time.

TESTS.—As a test, call for certain statements in every audit, even if none of the accounts appears to be irregular. Disputes regarding discounts, allowances, returns, etc., occur so frequently that it may be the auditor's only chance to test the reliability of the purchase records.

ORDER AND RECEIVING BOOKS.—An inspection of the order and receiving books is also important because it may disclose receipts of goods at or before inventory time the invoices for which are not entered, the reason given for the omission being that as the goods were received late it was not considered worth while to add them to the inventories, or to pass the invoices through the books until after the closing date. If this practice involves a few items of small amount only, it is not worth condemning, but if the quantities and amounts are relatively large the auditor must add the goods to the inventory and the amounts of the invoices to the accounts payable.

When examining the receiving and other records for evidence of purchases not represented by entries in the books, it should be remembered that the date of an invoice may not represent the date of its shipment, the practice of "dating" (i.e., dating an invoice forward to some future time) being not at all uncommon.

GOODS RECEIVED FOR NEW SEASON'S OPERATIONS.—In many cases balance sheets are made up at a time when there is supposed to be a "clean up." Inventories should be at the lowest point of the year. It sometimes happens that goods ordered long in advance to be used in succeeding periods have been received prior to the inventory date. In some cases, auditors have consented to add a footnote to the balance sheet stating part of the facts and omitting the aggregate purchase price of the goods received. Concerns are ill-advised when it is assumed that such a footnote creates a more favorable impression than the inclusion of the

goods in the inventory and the liabilities in the accounts payable. There is no objection to segregating the inventory from other items if it is deemed to be desirable. Under no circumstances is an auditor justified in omitting a reference to the facts. So long as reference must be made, it is better to incorporate the items in the usual groups and obviate the need for special reference.

Trade and Cash Discounts.—It is assumed that the ledger balances represent the amounts due after trade discounts have been deducted but before cash discounts are taken into consideration. Trade discounts should not appear on the books of account; as they are direct deductions from list prices, they should be deducted before entry of the purchase invoices to which they apply. Regarding cash discounts, however, the practice is not uniform. Some concerns take advantage of every cash discount and make the deduction immediately upon receipt of the invoice and before it is entered. Where this is done the auditor need not hesitate to pass the accounts as they stand, but where the deductions have not been made the auditor should be governed by the size of the discounts. Where the allowance is 2 per cent for payment within ten days, or where the rate is lower, the amounts due should be taken at their face. This gives the period following the balance sheet date the benefit of the earning, but it is not out of proportion to the cash required and the expense of salaries, postage, etc., incurred. On the other hand, if the allowance is more than 2 per cent for prepayment, and if the concern has ample funds to pay all maturing accounts, it may reasonably be urged that the earning belongs to the period preceding the closing of the books. For instance, an invoice for $1,000 may be dated June 23, "thirty days net, 3 per cent ten days." It can hardly be urged that on June 30 the liability will be more than $970, provided that the cash balance indicates that the discount will be taken advantage of.

If the auditor desires to adjust the accounts in accordance with this suggestion, it is necessary only to note the actual

deductions, per cash book, during, say, the first half month succeeding the balance sheet date, allowing for any possible items arising out of new transactions. This obviates the necessity of calculating the amount in detail.

As a matter of general practice an auditor does not care to take advantage of this opportunity to reduce the liabilities, since there are possible deductions from assets which usually more than offset this amount; but if the greatest exactness is required, or if there is any evidence of a desire to understate the net worth of a concern by undervaluing the assets, it may be necessary to apply the same principles to the liabilities. Or again, a concern doing a very large business, such as a department store, may allow no cash discounts to customers but may exact them from its creditors. In such a case the adjustment suggested may make a material change in the balance sheet.

Liabilities for Goods Received on Consignment

If the business under audit is one in which there is a possibility that all or part of goods received on consignment have been sold without any liability therefor having been recorded in the books, the auditor must use all due diligence to cover the point fully. Instances have been known where concerns have sold and collected for consigned goods without making any record of the liability until payment was made. This may occur when owned and consigned stock-in-trade are mingled and a general sales account is credited as sales are made. There may be no intention to deceive, since consignment accounts are usually treated as memoranda only.

If inquiry develops the fact that goods have been received on consignment, all records in connection therewith should be called for. If the goods have all been sold, the consignor's account should show the full amount due and, if the debt is a current one, the amount should appear among those due to trade creditors.

If it appears that the consigned goods are partly sold and

partly on hand, a memorandum or "pro forma" account sale should be made up for the part of each lot disposed of but not yet accounted for. The net proceeds due to the consignors should be entered as a liability in the account, "accounts payable consignors." As some time may elapse before payment, it is not necessary to include the aggregate among the trade creditors, except as a liability accrued, but not due. When the books are reopened, the entries for uncompleted consignments should be reversed.

Notes Payable

It is usual and desirable to divide the aggregate of notes payable into:

1. Notes issued for merchandise.
2. Notes discounted by client's own banks.
3. Notes sold through brokers.
4. Demand loans.

A further separation which is not often seen, but which is most desirable, is:

1. Notes accompanied by collateral.
2. Notes not accompanied by collateral.

When notes are secured by collateral, the auditor should verify the existence of the collateral by correspondence with the holders thereof.

There is not much to say on the procedure involved in verifying the existence of outstanding, unpaid promissory notes except to warn the auditor that a great many instances have been known in which outstanding notes were not shown as liabilities on books of account.

CONCEALMENT.—It may safely be said that, if deception is intended, so far as the concealment of liabilities is concerned there is a greater likelihood of its existing in connection with notes payable than with accounts payable. The latter are usually

evidenced by invoices, and any attempt to hold them out attracts suspicion on the part of the office staff. With notes, however, it is comparatively easy to secure discounts, secrete the proceeds, and make no entry therefor on the books. This omission is more difficult to detect in, and probably occurs more frequently in connection with, single-entry than double-entry books.

The point is of special importance where audits are made for the benefit of prospective lenders of money. The borrower tries to increase his assets and to decrease his liabilities to the greatest possible extent. He also may attempt to conceal the fact that he has issued notes and may be carrying open accounts on the books, while in reality notes have been issued therefor which are falling due or which are overdue and unpaid.

In a recent bankruptcy case it was disclosed that a large number of notes had been given to creditors without any record thereof appearing in the books. The notes bore interest and several creditors had secured judgment for non-payment. As the interest and costs amounted to a considerable sum, the liabilities were increased accordingly.

A more dangerous type of concealment exists when notes are issued in the firm or corporate name for money borrowed by individuals and then pass into the hands of innocent holders, who, of course, can collect if the concern is solvent. Notes of this description are sometimes renewed many times before discovery. An auditor who examines the books of account in the meantime is not likely to find any trace thereof. The auditor should in all cases ask each bank with which the concern under audit is, or may be, doing business what, if any, obligations it holds which the concern may have to pay.

Discounted Notes.—If the notes are discounted by one of the regular banks, it seems that the auditor, as well as the office staff, is put on notice. This liability is often concealed by a statement to the staff to the effect that the discount is a personal loan to a partner or officer. The auditor may secure a clue,

or at least grounds for suspicion, if he traces back to its source every credit of cash to the account of a partner or officer of the corporation. As a matter of fact so many so-called loans of this nature are made that an auditor may with propriety ask the question in connection with every such loan: "Where did you get it?" In other words, the credits to the individual accounts of partners or officers may represent items which are in fact liabilities of the firm or corporation.

THE INTEREST RATE ON LIABILITIES.—This question has been asked: "Should the interest rate be shown on a balance sheet when the contract rate substantially exceeds the legal or ruling rate?" In the author's opinion the rate should not be shown on the balance sheet. It may be of interest to creditors but it is of more interest to competitors and the possibility of unfavorable reaction outweighs the desirability. Usually such conditions have mitigating or compensating features which cannot be explained on balance sheets; the necessary omission of the explanation renders it necessary to omit the mere fact.

Mortgages

As a mortgage derives special value from the fact that upon registry it becomes a lien, the auditor has an opportunity to verify the existence of such an obligation by inspecting the public records. Auditors admit the value of the knowledge which such an inspection discloses, but very properly urge that special training is necessary to undertake the task.

LAW INVOLVED.—All agree that to be a well-equipped auditor one must have some knowledge of law. An important branch of such necessary knowledge is that pertaining to negotiable and non-negotiable instruments, mortgages, deeds, contracts, etc. A reasonably intelligent auditor or audit clerk can ascertain the procedure of the public registry office in less than an hour, and a search for unsatisfied mortgages or judgments can be made in less time than it takes to verify the footings of a voucher

register, and is an immeasurably more important thing to do. If the auditor is timid about undertaking the job, it may be worth while to arrange with a local lawyer or title company which for a small fee will report to him any mortgages or judgments entered against his clients.

So much for a purely independent search. If the auditor feels justified in accepting the book record as to the existence of a mortgage, he should at least endeavor to verify the amount, the rate, the due date, and the property secured thereby. All of these points are of interest to those who may desire to refer to the balance sheet of the mortgagor.

Recording Payments.—It should be borne in mind that a payment on account of a mortgage must be recorded or the entire amount will remain an encumbrance on the property. Therefore, if payments on account appear, the auditor should ascertain if the principal has been legally reduced; if not, the fact should appear on the balance sheet.

Manner of Stating.—The auditor should so state the mortgages that one can determine at a glance whether property was bought subject to a mortgage on which someone else is liable, or whether the mortgage was executed by the client. In the former case the client can be liable only to the extent of the value of the property, and therefore on the balance sheet the mortgage should be deducted from the value of the property on the asset side. In the latter case the client may be held liable through a deficiency judgment for the excess of mortgage, interest, expenses, etc., over the amount realized from the sale of the property. In such case the mortgage should be stated on the balance sheet as a liability.

Bonds

So many different classes of bonds have been evolved by the fertile brains of financiers that no attempt will be made here to differentiate except in a general way.

Bonds secured by a mortgage upon real estate are, excluding

government bonds, the most popular with investors. At one time all bonds, if not otherwise designated, were presumed to be secured by real property, but today many issues of bonds are mere promissory notes, differing only from the usual form of the latter in that they are larger in form, have coupons attached, are sealed, and are also less valuable because they do not fall due for a considerable period. From the auditor's point of view the security is important because of its bearing on other obligations and because of the equity, if any, which exists for a subsequent lender or creditor.

As a rule, balance sheets are deficient in the information which they impart with reference to the real estate or personal property which is pledged with an issue of bonds. Sometimes a bond is a first lien on certain assets and a second lien on others. It may not be possible to explain in a condensed balance sheet the items or properties which are pledged under a mortgage; but if it is feasible to have a balance sheet disclose the position which a bond bears to the assets, it is the auditor's duty so to state it. In any event he should determine as nearly as possible the position, if it is not so disclosed.

Corporations which issue bonds should, and in most cases do, keep a copy or sample thereof. The auditor should read this carefully in connection with the mortgage or deed of trust, make an abstract of these documents, and note all references to interest rate (or rates, since changes are sometimes made), due date or dates (instalments of principal are frequently provided for), property pledged, sinking fund or similar provisions, and in fact anything which relates to the accounts or financial transactions of the maker.

When considering the matter of liens it should be noted that usually unpaid interest is a lien equal to the unpaid principal.

Rules Which Govern Loans

The following rules relative to the borrowing and loaning of money were prepared by very able authorities:

1. The purpose for which the borrowed money is to be used should produce a return greater than is needed to pay the debt.
2. The length of time the debt is to run should not exceed the productive life of the improvement for which the money is borrowed.
3. Provision should be made in case of long-time loans for the gradual reduction of the principal.

Judgments

It frequently happens that a prosperous concern disputes a claim, litigates it, and has judgment entered against it. If the case is appealed the judgment may be allowed to stand or a bond may be given pending a final decision. In rare instances are these debts entered on the books. Most business men consider that the entry of an invoice is an admission of liability, and of course will not permit the entry of a claim which they propose to fight.

What position must the auditor take? If a balance sheet is being constructed, the amount of the judgment should be included as a liability, or a reserve should be set up to cover the estimated liability under the claim. If a balance sheet has been completed, the auditor should call attention thereto in a footnote.

How is the auditor to secure information as to the existence of judgments? As mentioned under mortgages,[6] he himself should be able to examine the public record. If he is not willing to do this, he should make such inquiry or investigation as is feasible. An inspection of lawyers' bills is a good way to secure a clue. If a concern is able to pay but does not do so on principle, the auditor will have no difficulty in learning the facts. If a concern is obviously hard up, the auditor is charged with constructive knowledge that judgments *have* been obtained, and he

[6] Page 235.

is not safe unless he secures a report based on a search. Even if the search costs a few dollars the expense will be well worth while. If the audit is made for a banker, the latter may have had a search made, or, if not, will on request do so through his own attorney.

Interest Payable

Many of the liabilities which appear on a balance sheet carry interest, therefore the calculation of accrued interest to the date of the balance sheet is an important matter. The auditor should consider the possibility of an accrual on accounts payable as well as on notes payable, bonds, etc. Enough book accounts bear interest to warrant an inquiry into the possibility of its existence.

Loan accounts of partners and officers of corporations almost invariably bear interest, but it is not always calculated to the date of closing the books. Judgments, overdue taxes, and other liens, sometimes bear interest at extremely high rates.

Legally, the interest on bonds (except income and similar bonds) is secured by the same property as the principal and in effect becomes part of the principal, but the latter is a long-term obligation, while interest is payable at frequent intervals and should therefore appear as a current liability.

Taxes

Bond interest which accrues from July 1 to December 31, and which is payable on January 1, always appears among the liabilities on December 31, assuming, of course, that a proper system of accounts is in force. The federal tax accrues as of December 31, or at the end of the fiscal year, just as surely as any other item.

The balance sheet of a commercial enterprise, prior to the enactment of the federal excess profits and federal and state income and franchise tax laws, rarely included a liability for accrued taxes unless real estate was owned. Under the laws

mentioned, taxes are imposed upon the net profits of corporations. This tax must be paid even if a corporation is dissolved before the end of the year for which the tax is imposed. Since the tax is specifically based on the net profits of a particular period, although payable some months thereafter, the tax accrues throughout such specific period; consequently, if a net profit is disclosed upon the closing of the books, an adequate reserve should be provided therefor. The auditor should insist that such a reserve appear among the liabilities and should refuse to certify the balance sheet if it is omitted. Unfortunately, there is a tendency in some quarters to treat accrued taxes as a reserve or as a possible liability rather than as an actual debt to be paid in cash on fixed dates.

The question arises as to whether the auditor, when making a first examination, should determine if there is a likelihood of additional assessments on the taxes paid for the years prior to that under examination. As the auditor can satisfy himself in the majority of cases in a short time whether there appears to be a material liability for additional taxes, it would seem that he should make at least a test to determine whether such a liability exists. If he is not allowed to make such a test, he should protect himself by inserting a notation on the balance sheet to the effect that the question of additional liability on taxes for previous years was not considered. Inspection of the published balance sheets of many well-known corporations indicates that the practice of providing adequate tax reserves is general. In many cases the statement is made that the liability has not been determined, that it is estimated, but that the estimate is believed to be ample. Therefore it is good accounting practice to state the amount of the estimated accrual rather than to omit the liability because it is difficult to make an estimate.

A corporation which had made a large temporary profit was dissolved in July. A balance sheet was prepared and on its showing, a distribution of capital and profits was made. In the following February the government demanded a tax return and

payment of the unpaid tax. One of the directors had to pay the assessment.

The matter of taxes is of particular importance in all audits of public service corporations, but the auditor should consider the possible liability for taxes before finally passing upon any balance sheet.

Water Rates, etc.

There are certain expenses, such as gas and water, the bills for which are frequently rendered at long intervals. The audit should provide for all accrued expenses of this class.

Insurance

The liability for premiums on insurance taken, but for which no entries have been made, should be included. Special attention should be paid to premiums on employees' liability insurance policies which are generally based on the pay-roll and for which in many cases the liability has not been calculated or billed to the date of the audit.

Wages

The date of the balance sheet does not always coincide with the date to which a pay-roll is calculated. The amount accrued should be ascertained and entered as a liability, unless it is trifling.

If there is little fluctuation in the number of men employed, it is sufficient to take the proportion of the full week's pay-roll; i.e., if the next succeeding pay-roll amounts to $1,000, and three days accrue in each period, the liability can be stated at $500, although each day's total may vary a few dollars from the others. The difference is not large enough to pay for the work involved in making the calculations.

Rent

Rent is usually payable in advance. If, however, any is accrued and not paid, it should be shown.

Freight

Sales are frequently made on a basis of free delivery to destination, and current freight bills are sometimes permitted to run, if the concern is well known.

An allowance of freight to a customer should be treated as a deduction from amounts due from trade debtors.

Goods may be shipped, refused, and returned, in which case freight charges accrue.

Traveling Expenses and Commissions

It is important to note whether the accounts of all traveling salesmen are received and entered before the books are closed. The auditor should secure a list and, if any report was not so entered, provision therefor should be made.

Ample provision should be made for all commissions eventually payable on sales which have been billed to customers. Since commissions are frequently not payable to salesmen until the sales have been collected from the customers, accrued commissions are often omitted from the books. As they must, however, be paid from the proceeds of the sales on which the full profit has already been taken into the accounts, they should clearly be set up as liabilities.

Legal Expenses

All concerns have more or less litigation. Lawyers are usually expensive, but they have the merit, if it can be so termed, of waiting for their money. Before the books are closed the lawyers should be requested to send in a bill. If one is not furnished, the auditor should ascertain the amount due, if any.

Audit Fees

In line with the theory that all accrued expenses must be included among the liabilities, it may be assumed that the expense incurred for an audit to, say, June 30, is a proper charge to the period prior thereto. In practice, however, it is not usual to include the audit fee as an outstanding liability as of the date of

the balance sheet. If the auditor does not perform any work on the accounts until after the closing date, it is certain that no legal liability therefor exists at that time.

Under ordinary conditions the amount of the fee is not known until after the report is written and submitted, so that no more than an estimate can be included.

Ordinarily the fee is not such a liability as should be provided for, if the audit commences after the closing date. An exception should be made, however, in cases of partnerships or close corporations from which a partner or stockholder is about to retire. The audit being partly for the benefit of the retiring party, and he being entitled to a copy of the report, it is proper that a sufficient reserve be set aside prior to the closing of the books, to provide therefor.

Employees' Profit-Sharing Plans

Unless otherwise provided for federal and state taxes should always be deducted before arriving at the amount to be apportioned.[7] The net amounts due should appear as a liability in the period during which the profits accrue, even though the liability is not determined until a later date.

Damages and Other Unliquidated Claims

It is customary to insure against liability for damages claimed by employees or the public, but few insurance policies, if any, assume an unlimited liability. Moreover, all concerns do not carry such insurance, although it is a reflection on a man's business ability to neglect such protection. Furthermore, claims for damages may arise out of alleged breach of contract, or failure to deliver goods, or for any one of many other reasons.

The auditor should inquire as to this possible liability and should also request that a letter be procured from the concern's attorneys stating or commenting on any pending claims or suits.

It may be that claims have arisen which have not been referred

[7] For full discussion of this question and formula for ascertaining amounts due, see *Income Tax Procedure*, 1921, pages 310–318.

to the attorney. It often happens that a salesman claims commissions in excess of those paid to him, that an employee who has been dismissed claims salary or other compensation for an uncompleted term of service, or that claim is made for a part of profits, which has not been paid. It is true that these are unusual items, but it is equally true that millions of dollars have been paid out in liquidation of such disputed claims.

If an auditor finds any evidence which leads him to suspect that there may be a possible liability of this nature, he should insist on being informed as to all of the facts. He can then form an opinion as to the reserve, if any, which should be made on the books and balance sheet to provide therefor.

Coupons, Unused Tickets, etc.

The auditor of a railway company expects to (but may not) find a reserve account for the outstanding liability on unused tickets, but this point receives little or no attention in other cases. Many kinds of enterprises sell tickets, or issue coupons at a discount for cash, which are a charge against the subsequent operation of the business. Tickets or coupons are issued by taxicab companies, spring-water dealers, restaurants, amusement parks, and shows. Telephone companies formerly issued stamps good for long-distance calls.

Not all of the unused tickets, etc., will be presented, but so long as they are outstanding, provision must be made for their redemption. The auditor need not attempt to verify the outstanding liability in detail, but he should carefully examine the system followed, because, if the proper principles are observed, the outstanding book liability will be in excess of the actual redemption which may be expected. Many tickets, coupons, etc., are lost or destroyed, and it is obviously impossible to issue duplicates.

Deposits

Reference is not made here to the deposits received by banks, bankers, and saving funds, but to the funds which are deposited

as a guarantee of good faith, or as part payment on a purchase, or as security for an unliquidated or possible debt.

If the concern operates under a public franchise, as does a gas or electric company, it may have the power to require deposits, and in many instances it will be charged with the payment of interest thereon. Interest is not usually paid until the receipt for the original deposit is surrendered, and this may be many years afterward. Large numbers of the receipts are lost or destroyed and demand is never made. Nevertheless, the companies should carry all of the deposits as liabilities and reserve the interest accruing thereon until a sufficient time has elapsed to warrant writing off such deposits as may remain uncalled for so long that the chances of payment are remote.

The custom of receiving deposits of money from employees is well enough established to warrant the inclusion of the caption "deposits" as one of the liabilities to be reported by prospective borrowers to banks.

The auditor should investigate the procedure followed from the time a deposit is accepted to the time it is withdrawn. There should be ample safeguards surrounding the handling of such funds, since the deposits are frequently offered by ignorant persons and foreigners who are not familiar with business methods and who might be induced to accept irregular receipts from clerks not authorized to handle the money. It is important that the books and stationery used be specially prepared for the purpose, and the utmost care should be taken in writing up the records. The clerk in charge of the books should not be allowed to receive or pay money.

If pass-books are furnished to depositors, the auditor should call in as many of them as possible and compare the entries and balances with the books. There are so many different methods in force that the auditor must rely on his general experience in order to satisfy himself that the aggregate deposits appearing on the balance sheet as a liability represent the actual amount due to depositors. The rate of interest paid should be

verified and the calculations tested. Accrued interest not credited to depositors at the date of the balance sheet should be added to the total deposits shown by the books.

For various methods of calculating interest, see Chapter XXIX.

In clubs and similar organizations it is customary for members to deposit small sums as security against the loss of keys, etc. To avoid bookkeeping in connection therewith, a very loose method may be in force. Frequently the cash received is placed in a drawer or box without any record being made. Subsequent payments are likewise made without record. Theoretically the balances on hand represent the liability for outstanding keys, etc. Practically it is known that part of the cash will never be called for. This permits unauthorized payments to be made from the fund, or part of it may be fraudulently abstracted. The matter is unimportant except that such laxity places temptation in the way of junior clerks and may be responsible for starting them on a criminal career.

The auditor should call attention to the importance of making a careful record of *all* receipts and payments, no matter how small, ostensibly for the purpose of facilitating an audit, but in reality to inculcate in every employee handling cash the greatest care and accuracy in connection with the handling of money.

Unclaimed Dividends

The proper way of dealing with dividend accounts is to set aside in a separate fund or bank account the full amount of each dividend declared, charging against it all payments.

It sometimes happens that stockholders cannot be reached, and dividend checks are withheld or, if issued, are not cashed within a reasonable time. This may leave an outstanding liability which may remain undischarged indefinitely. If such a state of affairs exists, any payments out of the regular order should be noted, since it may be found that unauthorized payments are being charged thereto.

CHAPTER XIII

BALANCE SHEET AUDIT—CONTINGENT LIABILITIES

A balance sheet should show not only what must be paid; it should show all contingent debts as well. Many prosperous concerns have been wrecked because compelled to meet obligations which did not arise from ordinary business transactions. Nevertheless, the obligations were real ones, no matter how unlike real ones they appeared to be when contracted, and a true statement of the financial affairs of such concerns, prepared at any time after the obligations were incurred, would have shown them. Accountants experienced in bankruptcy affairs well know that rarely, if ever, do contingent liabilities appear on the books of account.

It is the duty of an auditor who makes a balance sheet audit to discover and report upon liabilities of every description—not only liquidated debts, but contingent debts as well. It is true that contingent liabilities are at best difficult to locate, and almost impossible to discover when an attempt is made to conceal them, yet a professional auditor must undertake difficult tasks, and if he cannot report on anything except the entries which he finds in the books, he should retire from the profession.

Contingent Liabilities Defined

As used in a balance sheet audit, the term "contingent liabilities" means: (1) primary or direct financial obligations which at the date of the balance sheet cannot be reduced to stated or definite amounts and for which specific reserves cannot reasonably be created, and (2) secondary financial obligations upon which the probable loss, if any, is covered by adequate reserves. As pointed out elsewhere,[1] balance sheets and income

[1] Page 268.

statements are always based upon estimates. The auditor must include in the accounts for a stated period all of the income, charges, and losses which affect that period even though many of the items are estimated. The term "contingent liabilities," therefore, does not embrace such items as accrued expenses and losses which can with reasonable accuracy be reduced to figures.

PRIMARY OBLIGATIONS.—Class (1) includes the following: Litigated matters, such as alleged patent, copyright, and trademark infringements and damages for breach of contract, and claims which are founded on contracts or agreements to which there appears to be an adequate defense. This class does not include damage and other lawsuits as to which past experience and contractual relations, express or implied, demand that reserves be set up sufficient to charge the fiscal periods affected with all expenses which belong thereto. The minutes and the attorney for the concern should be consulted regarding the existence of claims of this nature.

SECONDARY OBLIGATIONS.—Class (2) includes secondary or indirect obligations as to which no liability exists unless and until the primary obligor defaults. When the principal amount of the possible liability is known it must be shown in the balance sheet.[2] In requesting confirmations from bankers of direct liabilities, request should also be made for a report of indorsements, guarantees, etc. An investigation must be made to ascertain the probability of default and in case of default the probable loss, if any. When it appears that losses will be sustained, careful estimates must be made of the aggregate and entered as reserves for losses. The debit should be to the current income account and not to surplus. Transactions out of which losses may occur are as follows:

[2] It is customary to show the contingent liabilities as a footnote or in short in the body of the balance sheet. However, in some cases, notably notes receivable discounted, it is good practice to enter the liability as a deduction from the notes receivable asset items; but there is no objection to stating the amount in a footnote. For balance sheet forms see page 367 *et seq.*

1. Discount, sale, or transfer of notes receivable, trade acceptances, bank acceptances arising under commercial letters of credit, domestic and foreign drafts, such as those drawn by automobile manufacturers upon their dealers. In some cases sight drafts are treated as cash deposits. Any unpaid at date of balance sheet must be treated as accounts receivable discounted.
2. Indorsements of notes for affiliated or subsidiary concerns.
3. Indorsements of commercial paper as accommodation party.
4. Selling, pledging, or assigning of accounts receivable where the transfer attaches a contingent liability to the seller, pledger, or assignor.
5. The opening or guaranteeing of letters of credit.
6. Guaranteeing of payment of interest or principal of the bonds of another party.
7. Accepting suretyships, including those guaranteed for others.
8. Contracts for purchase of foreign exchange for future delivery.
9. Liability for unpaid stock subscriptions.

In all of the foregoing cases the contingent liabilities are offset by contingent assets, i.e., in case of default and payment by indorsers or guarantors, accounts or debts receivable from the latter arise.

In addition to the foregoing, obligations often exist which are more onerous than direct liabilities, viz.: agreements to maintain certain ratios of current assets, to set aside reserves, etc. The various obligations mentioned will be discussed in detail.

Liabilities Created After Date of Balance Sheet

In many cases new liabilities are created between the dates of balance sheets and the dates when audits are completed.

Should an auditor disclose such changes? In the opinion of the author it is not proper to insist on showing future transactions on a balance sheet when such new transactions do not involve any accrued profit or loss at the date of the balance sheet. When there are special reasons for showing future transactions on a balance sheet, there is no more objection to the practice than to any pertinent disclosure of possible interest. In one case a mortgage was placed by a corporation on its plant two days after the date of its annual balance sheet. All of the cash proceeds from the sale of the mortgage were used for additional plant construction. The company's net current asset position at the date of the balance sheet was not good; even so, the reasons for not mentioning the mortgage were stronger than the reasons for mentioning it. It was shown that the mere statement that a new mortgage was created would have an unfavorable effect. To minimize the bad effect a full statement of the manner in which the proceeds were to be used and the probable increase in the earning power would have to be made; such a discussion is not desirable in a condensed balance sheet. Those who are directly interested in corporations are entitled to and usually receive such information promptly, but there is no good reason for incorporating it in a certified balance sheet.

Notes Receivable Discounted

As shown under "Notes Receivable,"[3] an apparent asset may result in an actual liability. For instance, a trade debtor may give a note for $1,000, which closes his account. The note is discounted, which closes the notes receivable account. The debtor finds he cannot pay and renews the note when due. This may be repeated several times, but at last a renewal cannot be secured and the note must be paid by the indorser. After it is known that the note will not be paid at maturity by the maker, the liability of the indorser is more than contingent—it is actual.

---

[3] Page 110.

Offsetting Reserves.—Of course, if the reserve for bad debts includes a provision for the full amount of the note, it is duplication to set up an additional reserve or create a liability against the payment of the note. Usually the bad debts reserve is *not* large enough to take care of the contingent liability on notes discounted, so that the auditor should investigate the status of all notes under discount, and if it appears probable that any will not be met when due, the liability therefor should be shown. If the auditor is satisfied that notes will neither be paid nor renewed, he should include them under current liabilities.

Obligations of Subsidiaries.—In the case of a large holding company it was reported, after receivership proceedings had been instituted, that while its published reports showed liabilities of several millions of dollars, there existed additional liabilities aggregating a much larger sum. Nominally these liabilities consisted of indorsements upon the promissory notes received from customers, and therefore constituted a contingent liability only. Actually the notes were of the holding company's own manufacture, being the nominal obligations of subsidiary corporations, and, as to the greater part they were not represented by assets. In other words, they were notes payable of the holding company without offsetting assets, except as to a small percentage. The notes were for odd dollars and cents, presumably so drawn to carry out the fiction of being genuine receivables.

Indorsements

In addition to the contingent liability upon notes discounted for the benefit of the indorser, there may exist a liability based on indorsements for the benefit of others. These are usually known as accommodation indorsements.

It is not proposed to discuss this subject exhaustively, since the question of *ultra vires* at once arises, but from a practical point of view it may be assumed that every indorsement, whether by an individual, firm, or corporation, *may* become an ultimate

actual liability of the indorser. Promissory notes are negotiable instruments, and, in order that they may circulate freely, an innocent purchaser for value, without notice of a lack of consideration on the part of a maker or indorser, may sue and recover from any or all, in turn.

The assumption that the maker will pay, or that the notes will not be used, or will not find their way into the hands of outsiders, has been dissipated in so many thousands of cases that the auditor who fails to include accommodation indorsements as liabilities because he is advised that there is no possibility of payment being demanded, assumes a risk for which there is no professional, legal, or moral justification.

WHY INDORSEMENTS ARE SECURED.—It is possible that circumstances may exist in which such indorsements are not liabilities, as when a note is overdue and the holder has notice; but the vital point to bear in mind is that solvent, straightforward concerns as a rule neither request nor secure indorsements unless under stress of necessity, or in return for the payment of a consideration. If the maker of the note is "hard up," the indorser should expect to pay (as he usually is obliged to do). If consideration has passed, the indorser is still likely to have to pay, but having received compensation, his statement should show the amount thereof among the liabilities to indicate the risk which has been assumed. The full amount of the note, less the compensation received, is a contingent liability.

OFFSETTING ASSETS.—Naturally the auditor should not include indorsements among the liabilities on the balance sheet unless he gives due consideration to the possibility of an asset to offset. The offset usually consists of a claim against the maker or prior indorser who has failed to meet an obligation, which is at once prima facie evidence that the asset is not in satisfactory shape. In the majority of cases it is merely a question of sizing up a bad debt.

INDORSEMENTS NOT APPARENT.—The foregoing remarks apply to cases concerning which the auditor is informed or can readily ascertain that indorsements are outstanding. We have now to consider the procedure where such information is neither volunteered, nor apparent on the records. The author was about to state that the auditor is justified in assuming that the practice does not exist, since most concerns have a strict rule which forbids indorsements or guarantees, and that there must be special cause for suspicion before special inquiry need be made; but reflection brings to his mind so many instances of contingent liabilities of this nature that the suggestion is made that all audit programs contain some reference thereto.

CARELESS COMMITMENTS.—The financial "atmosphere" of a concern is a fairly dependable index as to possible obligations or entanglements which may find expression in commitments leading to future embarrassment. The most common cause is overextension of business affairs. This is more likely to occur with a prosperous man than with an impecunious one. The latter has little opportunity for expansion, while the former is fairly besieged by promoters and others who know by long experience that the most likely investor in a new and untried enterprise is a man who knows nothing at all about it. All over the country men who have made fortunes in their own businesses are squandering their capital in outside ventures.

If an auditor's report goes no farther than his client's office, it is nevertheless necessary for him to concern himself with the relation of outside ventures to the balance sheet of the business under audit. Now that banks are demanding certified balance sheets, the auditor must always proceed on the assumption that the balance sheet prepared by him will go into general circulation. The auditor who is observant, therefore, is able to determine from what he sees *in* an office what has probably taken place outside.

If a partner, or officer, has withdrawn considerable sums of

money for investment in outside enterprises, there will probably be some reference thereto in the books. The accounts of "close" corporations (those whose stock is closely held) are similar to the accounts of partnerships. The officers, who are usually also large stockholders, keep personal accounts in the corporation books. The charges to these accounts indicate, in some degree, the interest in outside affairs.

Let us consider the usual effect on the finances of a firm or corporation when its owners are connected with other enterprises. The firm or corporation has good assets of $200,000 and total liabilities of $100,000. Suppose one or more of the partners or officers becomes interested in another business or in a flotation of doubtful merit. It may be urged that, so long as the balance sheet of the firm or corporation is true and reflects its actual financial condition, the action of its partners or officers cannot affect it. But soon the outside venture requires more cash than can be supplied, so the partner or officer gives his note for $25,000, which is discounted. The auditor comes in at this point, discovers the interest in the outside deal, makes inquiry, and is informed as to the note. He finds, furthermore, that there is not the slightest prospect of the note being met by the outside business.

Is it not apparent that the cash account of the firm or corporation will be called on to meet that note? This has happened in thousands of actual cases; is it not liable to happen every time? Should the auditor state the assets at $200,000, the liabilities at $100,000, and a contingent liability at $25,000? Legally, no; but if he can find a way to do it, he should not hesitate. Banks, creditors, and investors would have saved millions of dollars in the past if auditors had so stated the affairs of corporations. Is it not possible to protect the innocent investor or creditor when facts of this nature are disclosed, and when a reasonable interpretation makes them relevant?

If there is nothing in the books to indicate any connection on the part of the concern itself, or of a partner or an officer, with

outside ventures, and if there is no apparent reason for suspecting any possible indorsement of another's paper, the auditor may not feel it necessary to carry his inquiries further. In fact, it may be impracticable even if it were desirable. Nevertheless, it must always be borne in mind that the indorsement of notes for outside ventures has resulted disastrously in cases where it was least expected; consequently it is a possibility of importance.

Guarantees, Suretyship

Almost all of the remarks under "Indorsements" apply with equal force to guarantees. In one case the liability is fixed and definite by reason of the indorsements of negotiable paper, whereas a guarantee may be less definite so far as legal liability is concerned, and the amount of the obligation may be uncertain. Otherwise there is the same likelihood of being required to pay ultimately, and if the guarantee covers an obligation incurred in connection with an outside venture, there also exists a strong probability that the funds necessary to discharge the obligation will be withdrawn from the concern under audit.

An Illustration.—The proprietor of a successful business reported to the mercantile agencies a net worth of about one million dollars. His statement indicated that his assets were not readily realizable, but his reported liabilities were small and his credit was rated first class. He was induced to invest in the stock of a distillery and was elected a director. The distillery needed money and he was induced to indorse some of its paper and guarantee other loans.

The president of the distilling company was found to be an embezzler to a large amount, and the company went into bankruptcy. The indorser and guarantor was called upon to meet obligations aggregating over $100,000, and he was unable to pay all of his debts as they became due. He eventually compromised with his crediters at 50 cents on the dollar.

If an auditor had stated the accounts of the guarantor's

business it is not likely that any mention would have been made of the outside liabilities, since the business was incorporated and the indorsements would have been *ultra vires* for the corporation. But when the notes came due and the guarantor started to pay, the only funds available were the resources of his own company, and these funds were used. Therefore his balance sheet handed to the agencies was misleading, because there were contingent liabilities affecting it *in fact* if not in law.

An auditor could have readily ascertained the existence of the directorship, and inquiry no doubt would have brought to light the indorsements and guarantees. If so, would he have been justified in mentioning the matter on the balance sheet? The author is of the opinion that it would have been desirable for him to do so. Whether or not it would have been his clear duty could have been determined only in connection with the circumstances of his employment. In a serious matter of this nature an auditor should consult his attorney before disclosing damaging information, because it is possible that the scope of his employment may be limited and that his only course is to withdraw from the engagement.

Acceptances

An acceptance is a draft or bill of exchange, across the face of which are written "accepted" and the date thereof, and "payable" and the date thereof, after which appears the signature of the payee. When the acceptor is not a bank or banker, the name of the bank or the place at which the acceptance is payable is also inserted.

Increasing Use of Acceptances.—The use of acceptances in this country has greatly increased in recent years. Since the Federal Reserve Act authorized member banks to accept bills involving the exportation or importation of goods, interest in and the use of acceptances have greatly increased. In the state of New York, state banks and trust companies are permitted

to accept drafts drawn upon them by their customers at sight, or on time not exceeding one year. This power extends to both foreign and domestic trade.

ADVANTAGES OF ACCEPTANCES.—Constructive service can be rendered by auditors by pointing out to their clients the advantages of a greater use of domestic acceptances. Concerns which are not adequately financed frequently borrow money on their accounts receivable, although the practice is not favorably regarded by bankers and credit men. The cost of capital thus secured is at least double the usual rate charged on bank discounts. If purchasers agree to accept drafts drawn upon them, covering specific invoices payable on the due dates thereof, there is then available to the sellers negotiable paper which can be discounted at a favorable rate. This plan has material advantages, is a saving to the seller, and involves the purchaser in no more annoyance than is necessary in drawing and sending cheques under the present system. The Federal Reserve Board strongly encourages this custom, and it may be expected that suitable legislation will be enacted from time to time which will make it even more desirable than it now appears.

TREATMENT.—Since financing by acceptances is becoming more popular, the auditor should be prepared to advise as to the proper treatment of the liability arising out of their issuance or acceptance. A concern drawing a draft on a customer, which is accepted by a bank or banker, can immediately discount it at its own bank or sell it in the open market, usually at a rate under the discount rate for commercial paper. From the point of view of the drawer, the transaction is then closed and no mention need be made thereof on his balance sheet. Of course this rule applies only when the accepting bank or banker is of unquestioned standing. If the drawee does not have national standing, consideration must be given to the contingent liability existing until the draft is paid by the acceptor or customer. The transaction, therefore, is of the nature of a customer's promissory note discounted at

bank, and the book entries are the same, except that notes not paid at maturity must be kept track of and preparation made to meet them, whereas the accepting bank, in the case of an acceptance, is responsible for the payment.

Unrecorded Liabilities.—It is the relation between the bank and the concern for which it is accepting that requires vigilance on the part of the auditor. The issuance of promissory notes and the liability for the payment thereof is fully covered elsewhere in this book.[4] Consideration must now be given to the possibility of an outstanding liability on acceptances not recorded upon the books.

Is it possible, however, for a concern to purchase goods, arrange to have a bank accept the vendor's draft, and receive and put the goods in stock, and yet make no record of the existing liability until the due date arrives?

So many instances are known in which goods were received and the invoices were not duly recorded, that equal attention must be given to this possibility when acceptances are concerned. The usual comparison of order and receiving records with purchase invoices should disclose any discrepancies arising from carelessness. It is not likely, however, that the additional safeguard of a comparison of creditors' statements with corresponding ledger accounts will be feasible, because an acceptance usually covers specific invoices and it is not likely that after the receipt of an acceptance the creditor will continue to include the invoices covered thereby in statements even though the invoices represented by acceptances are in fact still unpaid. Banks make a charge for services in accepting drafts, and payments of these charges should be vouched in connection with the acceptances recorded.

Where there is any likelihood of acceptances being outstanding, the auditor should ask the bank or banks connected with the concern under audit to confirm the existence or non-existence of such possible liability.

[4] See page 233.

Bank Audits.—The audit of a bank or banker necessarily involves consideration of the contingent liability which exists, so long as funds are not provided to meet at maturity the acceptances which are outstanding. Here, too, there is a direct relation between the charges for accepting and the acceptances matured and unmatured. The best method of exhibiting the liability on the books of the bank or banker is to debit the customer for whom the indorsement is made and credit bills payable. As the dates of maturities arrive it is expected that funds will be received to meet the payments due, thus closing the customer's account; and the payment of the acceptances as presented in due course will close the bills payable account.

Capital Stock Convertible into Bonds

Some issues of preferred stocks are convertible into bonds or other obligations, under conditions specified in the agreements under which they are issued. Until there is actual conversion, there is no corporate liability. In all cases balance sheets should show the terms of conversion. When conversion in substantial amount has taken place between the date of the balance sheet and the date of the auditor's certificate, attention should be called thereto.

Unfulfilled Contracts

We have said that liabilities, not shown on the books, in the form of contracts to accept delivery of goods contracted for before the date of the balance sheet, may call for the payment of large sums of money within a short space of time. It may be urged that on the face of this statement there is no change in the net result shown by the balance sheet, since an asset is received to offset the liability.

Orders for Future Delivery.—A banker, however, may look upon this condition in a far different light. The balance sheet, for instance, may show stock on hand large enough or too

large for the normal requirements of the business. Unfulfilled contracts outstanding at the date of the balance sheet which call for the receipt of additional stock, which may not be readily salable, will result in an actual liability, whereas the offset, the stock to arrive, will be an asset of doubtful value.

In every audit, therefore, the auditor should call for copies of all orders for future delivery. If such orders call for stock in excess of the current and reasonable prospective demand, mention thereof should be made in the balance sheet. The details reported should depend on the circumstances of each particular case.

On December 31, 1920, many concerns had outstanding commitments to receive goods and materials and to pay therefor much higher prices than similar goods could be secured for at that time. In so far as conditions were obviously considered to be temporary, the apparent loss was not taken up by most concerns in their accounts at December 31. Part of the responsibility for failure to recognize a material factor was due to the United States Treasury Department which promulgated a rule that inventories could not include goods the title to which had not passed to the purchaser.

Treatment of Contracts for Future Delivery.—The question of possible losses arising from future contracts must be settled without regard to the tax situation. A concern, at December 31, 1920, had contracted for the delivery of 200,000 pounds of crude rubber at 40 cents a pound, of which 100,000 pounds had been received or was in transit and the remainder had not been shipped. Other concerns were similarly situated. The market price on December 31, 1920, was 20 cents a pound, but there were few purchases at that price even though the cost of production was nearer 30 cents than 20 cents a pound. Does good accounting practice demand uniform practice in dealing with the situation?

What actually happened was this:

1. Concern A inventoried the rubber on hand and in transit at 30 cents a pound and made no provision for the quantity undelivered, under the theory that 20 cents a pound was not a fair market price, and that good accounting practice does not require the taking up of a prospective future loss.
2. Concern B inventoried the rubber on hand and in transit at 20 cents a pound, under the rule "cost or market, whichever is lower," and made no provision for the undelivered rubber.
3. Concern C inventoried the rubber on hand and in transit at 20 cents a pound, and out of surplus set up a reserve to write down to 20 cents a pound the rubber to arrive.
4. Concern D inventoried all rubber on hand and contracted for at 20 cents a pound.
5. Concern E inventoried the rubber on hand and in transit at cost (40 cents a pound) under the theory that the nominal market price was considerably under cost of production and that 40 cents a pound represented a great decline from the war prices and was less than the pre-war price.
6. Concern F, prior to December 31, canceled all of its contracts and set up as a definite liability the amount due the vendors as damages.

It has been urged that the orders in hand for manufactured goods influence the basis of valuation of raw materials; that if goods are to be delivered to responsible customers at prices fixed with regard to 40-cent rubber, the writing down of the value of the raw material would unduly decrease the 1920 profits and unduly increase the 1921 profits. From the point of view of a going concern, this argument is entitled to great weight. It has the merit of being definite. It has two weaknesses, however, viz., first, the probability of cancellations of orders by solvent concerns and the prevalent custom of accepting cancellations

without penalty; second, if it develops that the decline in raw materials is permanent or if further declines take place, it may be considered to be good business policy to accept cancellations or to reduce sales prices. In either of these contingencies there would be no undue increase in 1921 profits arising from a drastic writing down of inventories.

In theory, the best practice is to write down all inventories, including goods to arrive, to market prices. But the author does not advocate this practice unless the so-called market prices are reasonably stable. The result is not accomplished by setting up a reserve for possible loss out of general surplus. Whatever accomplishes the best result is the best practice. A true picture is to be painted if possible. The greatest objection to setting up contingency reserves out of general surplus is that charges against such reserves do not appear at any time as charges against income. In making comparisons for investment and other purposes over a period of years, what is designated as net earnings, or net income, or net profits, is used.

If it is believed that a permanent decline has taken place, the amount written down belongs in the income account. If the decline is believed to be temporary, it obscures the picture to merely segregate part of surplus. It is better to state that the entire surplus is available for extraordinary charges.

Treatment in Balance Sheet.—It is not general practice to show in certified balance sheets future commitments—sales or purchases; until it becomes fairly general it cannot be considered good accounting practice to insist upon it, but *whenever the information is essential to a true financial position*, it must be done. The information conveyed is of great interest and, unless publication discloses trade secrets, the practice started to some extent as of December 31, 1920, should be encouraged. When it is deemed proper to disclose the information, the following forms are suggested:[5]

[5] From "Treatment of Commitments of Purchasers," by Homer N. Sweet, *Journal of Accountancy*, March, 1921, pages 169, 170, and 172.

The company's contracts for purchase of material and for construction outstanding on (date of balance sheet) aggregated $..... payable during (period of time).

The company's contracts for purchase of materials to be delivered during (period of time) outstanding at (date of balance sheet) aggregated $..... or $..... more than the market value of the materials at (even date or more recent date).

On the basis of market values at (date of balance sheet or more recent date) the purchase contracts unfulfilled at (date of balance sheet) aggregating $..... would show a contingent loss of approximately $.....

The company's contracts for purchase of materials to be delivered during (period of time) outstanding at (date of balance sheet) aggregated $..... or $..... more than the market value of the materials at (even date or more recent date), but $..... is covered by sale contracts, leaving $..... as the net amount of possible loss.

The unfulfilled purchase contracts aggregate $..... at (date of balance sheet), and after applying thereto the unfulfilled sale contracts in excess of the inventory at (date of balance sheet) would show, on the basis of market values at (date of balance sheet or more recent date), a contingent loss of approximately $.....

Bond, Note, and Preferred Stock Stipulations

Nearly all agreements entered into by corporations which sell their securities to the public contain such provisions as that for the maintenance of adequate net current assets. There are provisions which are common to all such agreements and there are special provisions in almost every agreement. An example of some of the provisions contained in a carefully drawn agreement will be found in Appendix B.

Failure to observe the stipulations is dangerous because default may automatically transform long-term liabilities into current liabilities and authorize large immediate expenditures for the protection of creditors.

In all cases copies of the agreements must be secured and read. Any substantial variance from the terms must be mentioned in the balance sheet.

The Minute Book

Experience has shown that the minute book is a very prolific source of information as to contingent liabilities. About ten years ago, for several years in succession one of the largest corporations in this country issued its annual reports, containing an auditor's certificate which said in effect: "The balance sheet is correct, subject to any adjustments which may be indicated by the minute books, which we were requested not to read." The practice must have aroused adverse comment since subsequent certificates were unqualified.

If the minute books contained evidence of liabilities or of changes in assets, as might be inferred from the refusal to submit same to the auditors, how much dependence can the directors expect to have placed upon their report by the stockholders and the public? On the other hand, if the contents of the minute books are harmless, why should the auditors be refused access thereto, thus giving rise to unfavorable comment?

The auditor should always insist on an inspection of the minutes of the board of directors, also of the executive, or any other committee of the board. If permission is withheld, his certificate should be written along the lines indicated above, except that such refusal is notice to the auditor that special care should be taken in passing upon balance sheet items which may be affected by the action of a board of directors.

Points Involved.—The following points may be involved: contracts for additions to, or for additional, plant equipment; purchase of other corporations or large interests therein; contracts for future deliveries of goods and materials in unusual quantities; payments of bonuses and special compensation to officers and others out of past profits, actual payment to be made at a future date; settlement of pending litigation and disputes regarding tax and similar obligations, for sums in excess of the liability, if any, carried therefor in the books; possibility of litigation, such as alleged infringement of patents, which might

seriously affect the value of assets; contracts or agreements which might tend to increase the assets or reduce the liabilities. These are only a few of the matters which a reading of corporate minutes reveals to the auditor.

ILLUSTRATIONS.—Usually there is a disposition to conceal from an auditor evidence of contingent liabilities, the thought being that he may feel it his duty to provide therefor in the balance sheet. Less frequently, good news is withheld in order that the balance sheet will appear as badly as possible and thus give the directors time to acquire stock below its value.

The author once insisted on reading the minute book of a street railway company. The president's reluctance to produce the book was explained when it was found that, at a meeting which the president attended, he had agreed to accept common stock of the company at par for his services. He, however, directed the treasurer to pay him in cash. Since the stock was worth only a few dollars a share, his disinclination to carry out his agreement was natural, perhaps, but illegal and dishonest. He was obliged to adjust the matter.

If an officer of a corporation is found to be interested as a partner or otherwise in an outside enterprise with which the corporation has business relations, the connection should be carefully noted and it should be ascertained whether authorized by the board of directors. If not so authorized, the directors should be required to take some formal action in order to avoid possible subsequent criticism. The officer, for his own protection, should welcome such a course; but if he does not, the auditor himself should bring the matter to the attention of the board.

The author, while auditing the accounts of a chain store company, found that the treasurer of the company was interested in a concern supplying the fixtures to the various stores owned. The price of the fixtures seemed extremely high and the chain store company was very unsuccessful. The coincidence seemed important enough to warrant mention of it in the report. The

directors, however, sustained the treasurer and removed the auditor. Since the board had theretofore authorized the capitalization of a lease and the writing up of another item equally reprehensible, crediting both fictitious items to surplus and using the entire surplus for dividends, the auditor, being on record as to all of the questionable transactions, cheerfully retired without any effort to defend his position. Two years later the company went into bankruptcy.

In a New Jersey receivership proceeding, it developed that the minutes of the board of directors contained much information relative to finances and operations which had not been disclosed to the stockholders in the annual statement. The company had not employed professional auditors. These illustrations show the importance of the examination of the minute book.

CHAPTER XIV

BALANCE SHEET AUDIT—RESERVES, CAPITAL, AND SURPLUS

RESERVES

The status of reserve accounts is unsatisfactory from the point of view of the professional auditor, chiefly because the term "reserve" is indiscriminately applied to items which are essentially different. Thus an inspection of balance sheets discloses that the following accounts are called "reserves": provision for probable losses on accounts or notes receivable; accounts set up to cover depreciation of plant and other assets such as patents, trade-marks, etc.; discounts which it is expected will be deducted by trade debtors; arbitrary charges against surplus to provide a book account for "working capital"; sinking fund accounts to take care of depletion of mines, or to retire bonds at maturity.

Two Classes of Reserves.—It should be noted that some so-called reserves are really deductions from assets and should be so treated. These have the effect of liabilities, but other reserves are not liabilities at all. The distinction lies in the purpose for which the account is created. If the debit or offsetting entries are proper charges against income, then the accounts should be deducted from the assets to which they relate, or else they should be set up as liabilities and should never be grouped with the surplus account. On the other hand, if the accounts (such as the last two mentioned above) represent sums set aside after the net income of an enterprise is properly determined, to conserve its financial interests by reducing the surplus available for dividends, these sums in reality form part of the general surplus

of the business. In preparing balance sheets, these latter accounts should be stated as a section of the surplus account.

Surplus Reserves.—Reserves for retirement of bonds, notes, or preferred stock, for working capital and for contingencies are examples of surplus reserves. The chief purpose and value of such reserves is to prevent the payment of dividends until certain obligations are met, after which the reserves should be transferred back to surplus unless it is not proper to do so.[1] If there is no reasonable chance that reserves will be restored to surplus, it is plain that the reserves were improperly created—they should have been debited to income instead of to surplus in the first instance.

Net Income.—The accountant's definition of net income, which has been upheld by the courts,[2] requires charges against income for all expenses and losses accrued as well as paid during a certain period. The main difference between the decisions of the courts and good accounting practice is that the courts uphold the principle that when so-called gross income is indeterminate or doubtful it must be appraised at its net value, or entirely omitted from a computation of net income until the outcome is definitely ascertained, whereas accountants include the items in full in gross income and appraise the net value at the end of accounting periods by means of reserves. The net result is the same, viz., the net income for each period is stated on the most accurate basis possible. Of course in such computations there is much estimating but *it is careful estimates which make for accuracy*. All balance sheets and income statements are based to some extent on estimates. Inaccurate balance sheets and income statements are those in which the least care is given to estimates. Accurate balance sheets and income statements are based upon careful estimates.

The Treasury in the past has adopted a method of ascertain-

[1] See page 283.
[2] See page 308.

ing net income which ignores both court decisions and good accounting practice. Its method permits full inclusion of estimates which are extremely difficult to compute, such as depreciation and obsolescence, but excludes estimates which can be determined with much less difficulty, such as bad debts. Eventually net income as defined in income tax practice will agree with net income as defined by the courts and as reflected in good accounting practice. In the meantime the latter must not be departed from to correspond with certain Treasury regulations which, in the author's opinion, are erroneous.[3]

Duty of Auditor.—The auditor's duty is to segregate the accounts so that the distinction in a balance sheet between liabilities and net worth will be apparent at a glance. It should not be necessary to make elaborate calculations to arrive at capital and surplus.

Reserves such as those set up to provide additional working capital cannot be treated as a liability in any sense. To whom is it to be paid? From a balance sheet point of view, a liability is an obligation or a debt to the public, i.e., something which must or may have to be *paid* before partners or stockholders can receive a dividend or a distribution.

Treatment on Balance Sheet.—In actual practice reserves are usually shown in the balance sheet between the definite liabilities and the surplus, making it possible to show the aggregate of the two classes and thus arrive at the proper amount to be deducted from the total assets in arriving at net worth. Whenever possible the reserves should be deducted from the assets to which they relate; but if there are good reasons for stating the gross amount of the assets on one side and the reserves against such assets on the other, then the reserves must be included among the liabilities in order that the aggregate of one side may be deducted from the other so as to determine net worth.

---

[3] See *Income Tax Procedure*, 1921, page 833 *et seq.*

This procedure must not be confused with the criticism of the form of balance sheet which shows on one side or the other items which are neither assets nor liabilities nor deductions from either class. Any amount directly related to an actual asset or liability may be grouped with it without violating the rule against the misuse of these two terms.

The author's test, therefore, is that a reserve account, to properly appear among the liabilities (or as the equivalent of liabilities) on a balance sheet, must represent:

1. Estimated amounts believed to have accrued and which, when determined, will be actual liabilities, such as accrued interest, wages, taxes, etc.

2. Items deductible from assets to reduce the latter to their true value, such as depreciation and obsolescence of plant, exhaustion of mines, estimated loss on accounts receivable, etc.

3. Contingent liabilities, such as the contingencies which are discussed in these pages, but the reserve should be based on evidence more tangible than mere conservatism. A vague feeling that something may have been overlooked which would decrease the assets or increase the liabilities is not the proper subject for a reserve. Conservative management "reserves" part of its surplus for such contingencies, but it appears as surplus and not as a liability.

In a case involving the valuation of capital stock for the payment of transfer tax, the court held that an amount reserved for contingencies should not be deducted in arriving at the value of the capital stock of a corporation.[4] The court referred to the reserve as follows: "As this is a reserve for contingencies which may never happen. . . ."

4. The reserve of an insurance company is usually an actual liability, i.e., income has been received and treated as gross income, whereas part only has been earned, as in the case of fire insurance and similar companies where premiums are paid in advance, and in which the unearned portion should be carried as a

[4] *In re Moore's Estate*, 161 N. Y. S. 142; 97 Misc. Rep. 238 (Surrogate's Court, New York County, October 30, 1916).

liability. Theoretically, the aggregate of this unearned income forms a reserve for reinsurance, the theory being that if a company desires to suspend business, it can reinsure its risks out of the reserve and thus leave its capital and surplus intact. Likewise, life insurance companies not only collect premiums in advance, but they also collect more than is sufficient to pay for the insurance carried. The excess is returnable to the insured under the contract, and is therefore a liability, and not part of the accumulated surplus of the company. Under some policies the excess is rebated annually, under others no distribution is made until the policy expires. From an accounting point of view a mutual insurance company has no surplus, since it agrees to insure at cost. All excess premiums received are the property of the insured. Of course a life insurance company should be conservative to the last degree, and it may be that it would not be safe to allocate all of the estimated excess income to specific policy-holders.

All of the classes of reserves just enumerated have been or will be fully discussed under their respective heads. The so-called reserves which are not charges against income, but which are set aside after net income is determined, and which therefore are in reality divisions of surplus account, will be discussed under the general title of "Surplus."

CAPITAL STOCK

Having discussed the asset side of the balance sheet, and having enumerated all of the obligations, certain and uncertain, which should appear on the opposite side thereof, the auditor should devote particular attention to the treatment of what may be termed the net worth of a firm or corporation. By this is meant the excess of assets over liabilities.

Balance Sheet Construction

Primarily a balance sheet is prepared for the information of the proprietors (including stockholders) whose assets and

liabilities are therein set forth. The sole interest of the proprietors being to ascertain the net worth of their property, the logical form of a balance sheet is to show the net worth clearly. But this is not done when assets are shown on one side, while on the other, under the general heading "liabilities," there appear in the following order: capital stock (not a liability), accounts, notes payable, etc., reserves (some being liabilities, some not), and surplus, the total exactly agreeing with the total of the assets.

The average investor does not understand accounts. How can he determine the net worth of the business of which he is a part owner? The proper way to enlighten him is to classify the balance sheet items. The assets should be shown, then the liabilities; the excess of assets over liabilities (if any) should appear next; finally the capital or capital stock and surplus representing such excess. If it is desired to set aside part of the surplus for other purposes, the segregation should be shown on the balance sheet. In the case of a corporation, all capital stock and surplus items should be grouped together in the balance sheet; when feasible one footing should be shown of the aggregate, which constitutes the net worth of the corporation.

There can be proper grouping when it is desired to state the assets and liabilities in parallel columns with the totals of the two columns in agreement,[5] as well as when the assets are stated first and the liabilities thereunder, followed by the capital plus the surplus, or capital less the deficit, as the case may be.[6] In both cases it should be noticed that the only variation of any consequence from the form criticized is in the captions and the groupings. But since these are read seriously by many business men, care should be taken to use terms as nearly descriptive of the items to which they apply as possible.

There is little defense for the form of balance sheet which shows capital and surplus as liabilities, and deficit as an asset. It

[5] See page 369.
[6] See pages 367–368.

is true that it enables an accountant to set down two sets of figures which exactly balance, and the author freely admits that some of the best corporations and some of the best firms of accountants use this form; but in his opinion the practice is merely the outgrowth of custom and expediency and will be changed in time.

Auditor's Certification Limited.—Whether stock is issued with or without par value, it is customary for the directors to fix the values of the assets paid in for such stock. Although an auditor is not supposed to certify to anything which he knows is not true, we have not yet reached the point where an auditor is justified in volunteering an opinion that capital stock issued in payment for property acquired is not full-paid because in his opinion the property is not worth the amount of stock issued therefor, whether at par or at stated values to be ascribed to no-par value shares. Of course, in a special investigation, an auditor may be asked to investigate points of this kind, but when in an ordinary audit stock has been issued for property, and the records are in satisfactory shape, the auditor is not compelled to challenge the good faith of the directors.

Audit Procedure

The auditor should examine the corporation's charter or certificate of incorporation, the by-laws, and the board minutes, for information relative to the authorized capital stock, the method of payment, and all other provisions governing its issuance. He should ascertain that there has been no overissue, by examining the certificate books and stock ledgers, and he should verify the proceeds of its sale. In many states capital stock can now be issued with or without par value.

Of late years it has become popular to adopt by-laws which require certain amounts of current assets to be maintained, certain reserves to be created, etc. The auditor should verify all of these requirements.

If stock has been sold on the instalment plan, the auditor should ascertain that the calls have been promptly met and whether or not any are in arrears. If special terms have been extended to any stockholder, approval of the board is necessary.

Certificates should be secured from transfer agents and registrars if any are acting in that capacity for the corporation under audit. If the stock were all in the hands of stock-brokers or financial institutions, it might be assumed that the certificates were conclusive; but so many stockholders fail to insist upon the simplest precautions and safeguards that it may be taken for granted that in spite of the blanks on the face of the certificates, the average stockholder will accept as genuine, stock certificates which do not bear the proper signatures. Furthermore, the corporation clerk or official who wishes to defraud will cheerfully fill in all of the necessary signatures.

Certificates from registrars or transfer agents should in all cases be requested, but they cannot be depended upon as conclusive evidence that there is no additional stock outstanding.

An Illustration.—The author's attention was called to a case in which the president of a bank drew certificates of stock in his own name, and filled out the stub of the certificate for 2 shares and the certificate itself for 200 shares. The cashier had previously signed the blank certificate. Proper payment was made for 2 shares. The certificate was then sent to the registrar's office and duly recorded for 200 shares. The president sold this stock and fraudulently retained the proceeds. The stock was not fully issued, which explains the action of the registrar; if there were an overissue, the registrar would refuse to validate the stock.

In this case the certificate of the registrar would have disclosed the fraud.

No-Par Value Stock

When capital stock has a par value, the term "capital stock" represents merely the par value. When stock having no par

value is issued, the term "capital stock" includes the entire excess of assets over liabilities represented by the entire number of shares issued; if there are shares of par value and also shares of no par value, the term "capital stock" means the total par value of the par value shares and the balance of the excess of assets over liabilities as representing the no-par value capital stock. When there are accumulated unpaid dividends upon preferred stock, the aggregate amount unpaid should be shown in the balance sheet; otherwise the equity accruing to the no-par value stock is overstated.

The situation is the same when a minimum stated value or multiples of such value may or must be ascribed to each share issued. The term "capital stock" is broad enough to embrace the arbitrary stated value and any excess value. The provisions of the state laws regarding stated or minimum amounts are merely regulatory for the protection of creditors. They are not intended to, and do not, change the meaning of the term "capital stock."

PROCEDURE.—There is a constantly increasing tendency to issue shares of capital stock having no par value. The method of verification of the total number of shares outstanding does not differ from the procedure suggested for par value stock.[7] The amount at which the stock is carried usually represents the proceeds of the sale of the stock. In some states the corporation laws require a minimum or stated value to be paid in respect of each share authorized, even though a less number of shares may be issued. There are so many special provisions that it is not practicable to enumerate them in this book. The auditor can readily secure copies of the requirements in any state and be governed accordingly. There should be little difficulty in determining the best method of stating no-par value stock in a balance sheet, although there are instances of improper statements which must be checked, or else the chief advantage of no-par value

[7] See page 274.

stock, viz., honesty in stating net worth, will be lost. When assets are fairly valued at incorporation, the excess over liabilities should appear as paid-in capital, irrespective of the number of shares authorized or issued. The number of shares issued should be so stated that it will be possible to calculate at a glance the book value of each share. The number of shares authorized should be stated for information purposes. When state laws require a stated value to be paid in and shown for each share, the aggregate thereof may be shown in one amount and the excess of net worth, if any, stated as capital surplus. There are differences of opinion as to whether or not capital surplus may be used to pay dividends. Some good authorities hold that it may, others hold that it may not. It is a legal question to be settled by the courts. No matter how it is settled, auditors should take the position that the excess of assets at time of incorporation constitutes the capital of the corporation, and that any payments of dividends out of such funds (except as liquidating dividends) are grossly improper—if not illegal. Balance sheets should clearly show subsequent operations. Net income should be shown as earned surplus; a deficit should be shown on the balance sheet as a deduction from capital surplus or stated capital. Any concealment of a deficit, accomplished by closing it into capital surplus, without showing the two accounts separately, is, or may be construed to be, a deception on those who use the balance sheet. There is no objection to applying a deficit arising from operations against capital surplus; but the practice is only per missible when the deduction is shown in the balance sheet of the year when the deficit is sustained.

The author reiterates that, even though state laws may permit corporations to fix the amount of capital which may not be impaired by the distribution of dividends, the privilege is purely technical. There is just as much moral turpitude in paying a dividend out of so-called capital surplus as out of capital, because in every way, except the bare legal distinction, they are the same and should be equally safeguarded.

The subject has been fully discussed by accountants; good accounting practice requires that capital surplus at organization be clearly segregated and at no time be merged with surplus arising from operations. The accounts should not be stated to excuse or justify in any possible way the use of capital surplus for cash dividends; if any doubt exists the entire amount applicable to no-par value shares at organization should be designated as capital, and the word "surplus" be omitted.

Restrictions Affecting Transfers of Capital Stock

Some corporations have special clauses in their by-laws which restrict the transfer of the capital stock. In several cases this has been held to be illegal and such clauses deemed void on the ground that capital stock is personal property and its sale should not be unduly restricted.[8] The restrictions are binding upon those who have notice of them, but are not binding upon innocent purchasers for value. When stock is sold to employees and deliveries are made of the certificates, there is an implied power of assignment. When it is desirable that the right to transfer the shares be limited, the result can be secured by printing the restrictions on the certificates. Any reasonable agreements among stockholders may be enforced if care is taken to prevent transfers to those who have no notice of the agreements. This is a question which arises in a great many close corporations and the auditor should be in a position to advise regarding it.

Stock Dividends

A stock dividend is a dividend declared by a corporation, payable in stock of the same corporation. As there is no actual

[8] *Johnston v. Laflin*, 103 U. S. 800 (1880).
McNulta v. Corn Belt Bank, 164 Ill. 427 (1897).
Quiner v. Marblehead Social Insurance Co., 10 Mass. 476 (1813).
Morris v. Hussong Dyeing Machine Co., 81 N. J. Eq. 256 (1913).
Steele v. Farmers', etc., Association, 95 Kan. 580; 148 Pac. 661 (1915).
Kretzer v. Cole Bros., etc., Co., 193 Mo. App. 99; 181 S. W. 1066 (1916).
Longyear v. Hardman, 219 Mass. 405 (1914).

change in the stockholders' interests, stock dividends are distinguished from cash and property dividends in which actual distributions take place. When a stock dividend is declared there is a debit to surplus and a credit to capital stock. The surplus is said to be capitalized. From the point of view of the auditor, no question of principle is involved. Unlike cash dividends, there is no objection to declaring stock dividends from capital surplus or from other surplus accounts such as premiums on capital stock. It is important, however, that the recipients of stock dividends which are not charged to earned surplus should be fully informed as to the source of the dividends. Obviously the value of the new stock is affected by the source from which it was derived. The auditor should take care to mention prominently the facts in his report and certificate.

Premiums on Capital Stock

When stock has been sold at a premium, the auditor should see that all premiums have been collected. The funds so realized should be credited to premiums on capital stock account, which should remain open, and appear on the balance sheet as a special surplus account. In no event, however, should the account be transferred to general surplus and thus be looked upon as available for cash dividends. It is probably legal to declare a cash dividend out of funds so raised, but such action would be sufficient to sustain a charge of dishonesty against the directors who vote for it.

SURPLUS

The term "surplus" in the balance sheet should have a meaning as specific as any item of the assets or of the liabilities. The "surplus" of a corporation should represent an actual surplus, that is, a balance of net income after all reserves have been provided, including the reserves of surplus, such as working capital. The balance thus represents an amount safely distributable as dividends.

NATURE OF SURPLUS.—This does not mean that there must be cash on hand sufficient to pay the whole amount of surplus in dividends, but it does mean that, if at any time there are surplus funds, the directors can rely on the integrity of the surplus account and cannot lay themselves open to an action for paying dividends out of capital, or before reserves for compulsory sinking funds, etc., have been created. Surplus is just as much a part of capital as is capital itself. It becomes capital in fact from day to day as it accumulates, and it decreases from day to day by means of losses or dividends. It becomes capital in theory once a year—but only because of expediency or convenience.

SURPLUS IS NOT A "FUND."—It is not unusual to find surplus accounts referred to as "surplus funds." Such terminology is incorrect; surplus accounts may represent funds if specific assets are segregated; usually, however, the amounts to the credit of surplus accounts are represented by undivided interests in net assets. The word "fund" imports something that is tangible and its use should be limited to tangible assets.

ANALYSIS OF SURPLUS.—The separation of surplus into accounts which disclose its composition frequently affords information of great importance to those who use balance sheets. Consolidation of the surplus accounts is sometimes resorted to when there is a desire to conceal material changes in financial condition. Good accounting practice requires proper segregation and does not sanction the consolidation of surplus accounts when such action tends to make a balance sheet less understandable.

Accretions to capital arising from reappraisals, from sales of capital assets, from gifts, from premiums on capital stock, etc., are known as capital surplus. When the amounts are substantial, separate accounts for each should be shown. The excess of the book value of assets over liabilities and capital stock at the time of incorporation is known as paid-in surplus. Subsequent contributions by stockholders, in cash or property, when additional capital stock is not issued, are also a part of paid-in surplus.

Accretions to capital from earnings constitute "earned" surplus; earnings which corporations agree to set aside as not available for current dividends are known as "appropriated" surplus.

The term "undivided profits" usually refers to the balance of current net income not transferred to surplus account in the books. There is no actual difference between the terms, "earned surplus" and "undivided profits," except in the case of national and state banks and trust companies, which make a distinction between surplus and undivided profits; the amounts which are definitely transferred to surplus are treated as additional capital, and are not available for dividends.

Surplus, in the balance sheet, should be divided into three general groups:[9]

1. Capital Surplus
2. Appropriated Surplus
3. Surplus

The first and third groups are self-explanatory. It is important, however, to ascertain that capital surplus is not diminished by operating losses, nor by dividends, unless the dividends have specifically been declared from capital. Any changes in capital surplus during a fiscal period should be shown in detail in the balance sheet or in accompanying schedules. This precaution is of unusual importance when no-par value stock appears in a balance sheet.

It is not necessary to credit the profit from the sale of capital assets to capital surplus. It is true that earned surplus should represent net income derived from the normal operations of a business; but profits realized from extraordinary sources are not true capital surplus. Capital surplus arises from contributions

[9] Possibly a fourth group should be set up to include items of liabilities completely subordinated to all other creditors. (See page 224 for discussion.) From the point of view of net worth available to pay creditors, the items belong in the capital group, ranking as a special class of stock; but as an actual liability exists, merely ranking after other liabilities, it is incorrect to include the items with surplus accounts.

by the owners of a business; profits arising from any subsequent dealings with the public are not in the same class. It has been said that when treasury stock is purchased at a discount, paid-in or capital surplus should be credited with the discount. This is a fallacy since there has been no new contribution of capital. One of the owners surrenders his interest for less than its book value and the remaining owners have a greater relative interest in book values than before the purchase; but the actual result is an appraisal of book values at less than face value. The transaction is not one which justifies writing up any surplus account.

There is little net or final difference between the profit arising from the sale of normal product and from the sale of surplus plant. Plant or property accounts may have been excessively depreciated so that apparent profits realized from sales do not represent actual net profits. When capital assets disposed of at a profit are to be replaced, it is not expedient (although it is not improper accounting practice) to credit the profits to earned surplus, since the gross proceeds of the sale presumably will have to be used in making the replacements. Under such circumstances the profits should be credited to special surplus or to replacement accounts and not made available for cash dividends.[10]

It may be said, therefore, that profits arising from sales of capital assets are capital or special surplus or earned surplus, depending on the disposition of the proceeds.

There is no real distinction between capital surplus and paid-in surplus. The latter term appears in excess profits tax procedure as a convenient term to describe capital surplus arising from specific sources.[11] The term should not otherwise be used. As stated elsewhere, surplus may be divided or appropriated by contracts with creditors or other outsiders or by action of boards of directors; so far as balance sheets are concerned there need

[10] Under federal tax procedure the proper segregation and disposition of the proceeds render the profits non-taxable. See *Income Tax Procedure*, 1921, page 585.

[11] For discussion of paid-in surplus, see *Excess Profits Tax Procedure*, 1921, page 152.

be only two groupings: one to represent capital or appropriated surplus, the other free or earned surplus.

Capital surplus and earned surplus are terms frequently used in tax laws and regulations. In general, tax procedure should follow good accounting practice, except when tax laws are specific in departure therefrom. When tax laws do not define capital and income, good accounting practice governs.[12]

The second group should be divided into as many separate accounts as are necessary to show clearly all compulsory and voluntary segregations. As to compulsory segregation, we find the following reserves for retirement of securities:

(a) Reserves for retiring bonds, notes, etc.
(b) Reserves for retiring preferred stock.

As to voluntary segregation we find:

(a) Reserves for working capital.
(b) Reserves for dividends.

Reserves for Retirement of Securities

In many issues of bonds, notes, and preferred stock stipulations are contained which require the setting up of reserve accounts. Some of the conditions upon which these reserves are based are: realizations of wasting assets; fixed instalments, i.e., specific sums or specific percentages of outstanding issues; dividends paid; stated percentages of net profits. There are many others. It is not necessary to enumerate the reasons for and the importance of providing the reserves, as such reasons differ according to the terms of the agreements under which the securities are authorized and issued. A careful reading of the entire text which appears in the obligations or the preferred stock certificates will inform the auditor as to the specific requirements to be met.

---

[12] For detailed discussion of capital and surplus accounts in relation to tax matters, see *Income Tax Procedure*, 1921, and *Excess Profits Tax Procedure*, 1921.

Treatment of Reserves.—It is not enough that reserve accounts be set up; the subsequent handling of the accounts is of equal importance. The requirements in some agreements are ambiguous, therefore a correct understanding of the intention of investors (rather than the intention of the corporations) is of great importance. The underlying purpose of requirements governing sinking fund or retirement reserve accounts is to limit or prevent the payment of dividends on junior securities. In the case of bonds and notes the intention is to limit or prevent dividends on stock; in the case of preferred stock the intention is to limit or prevent dividends on common stock. This intention is negatived if the surplus available for dividends is not permanently reduced by the full amount of the reserves. To put it affirmatively: the full amount of the reserves which corporations agree to set aside to retire bonds, notes, or stocks must be set up and remain in appropriate reserve accounts unless and until the full purposes of the requirement are met.

Even though the reserve accounts are largely in excess of the principal amount of the issues to be retired (through periodical instalments), it is not proper to transfer any part of the reserves to general surplus, unless the original agreement so provides, or unless the original agreement has been modified by unanimous consent of the interested parties.

In view of the purpose of agreements containing sinking fund provisions, any ambiguity therein must be decided in favor of the holders of the senior securities, and against the holders of the junior securities.

When Reserve May Be Carried to Surplus.—Under some circumstances it may not be proper to transfer special reserve accounts to general surplus even though the provisions in specific agreements are fully complied with. A corporation may increase its working capital by the sale of preferred stock. It may set up a reserve for retirement, and in time retire the entire issue. In theory, when all of the preferred stock is retired the full amount

in the reserve account may be transferred to surplus. In practice creditors usually have their attention called to, and they are asked to extend credit upon, balance sheets in which large reserve accounts appeared, which were segregated from surplus available for dividends. If a new balance sheet is prepared in which the reserve account is merged with general surplus and is made available for dividends on the common stock, it may be contended that a distribution which would include any substantial part of the reserve is an improper diversion of working capital. In one instance a corporation sold a preferred stock issue of $1,000,000. After receiving the proceeds its total working capital was $1,500,000. It required additional funds and on the strength of its balance sheet secured a loan of $1,000,000. Its net earnings during ten years were about $1,000,000, all of which were used to retire its preferred stock. It was purposed to transfer the reserve account ($1,000,000) representing the retired stock, to general surplus. The creditors objected on the ground that if any part thereof were paid out in dividends the corporation would have less working capital than when the loan was made, although the company had earned $1,000,000 in the meantime; that they had relied on the reservation of profits in the retirement account; that there was no provision in the agreement whereby the reserve account could be transferred to surplus; and that it was entirely reasonable that the common stockholders should not be permitted to receive funds which in effect were derived from borrowed money.

The dispute was not litigated because the decision was left to the auditors, who decided that the reserve account must stand until all of those who claimed to rely upon it were satisfied.

Sinking Fund Reserves.—Reserves for depreciation, when calculated scientifically, should be deducted from the assets affected or else should be shown as liabilities. Sinking fund requirements are usually in excess of actual depreciation or exhaustion reserves, so that the proper method must be adopted

to show that sinking fund requirements have been legally complied with; at the same time the assets and liabilities should be exhibited as they actually exist.

For illustration, a mortgage covering coal lands may require the payment to the trustee of 10 cents per ton mined. The exhaustion charge based on engineers' estimates may be 5 cents per ton. The reason for the difference is obvious. The holder of a bond does not care to take the chance of waiting until the last ton is removed before receiving the last of his principal.

Correct Procedure.—In order to sell bonds the security must be ample and a considerable margin must be allowed for errors in estimates. Most often the mortgage will require that the sinking fund shall be a charge against earnings. This is reasonable, since it serves to prevent the payment of excessive dividends until the bonds are all retired. However, there is no reason why the stockholders should be kept in ignorance, in the meantime, as to the true earnings realized, even if they are not entirely available for dividends while the bonds remain unpaid.

Therefore, the only way to show the exact (or as nearly exact as possible) earnings is to carry a reserve for exhaustion account among the liabilities equal to 5 cents per ton, and a reserve for sinking fund account equal to an additional 5 cents per ton as a segregated part of the surplus. After all of the bonds are retired this reserve account is closed into the general surplus account.

The reserve for exhaustion account should be sufficient to equal the book value of the property account by the time the coal is practically exhausted. This rule applies irrespective of any special requirements for sinking fund instalments, and irrespective of a trust deed provision to the effect that such instalments are a charge against income. All fixed or wasting assets must be kept intact, either in their original form or by creating an equivalent in cash or some other satisfactory asset. The amounts required to maintain this equilibrium are charges against income, but as soon as the instalments are in excess of such requirements,

the excess forms a part of the surplus of the business and should be shown as such. The question, how much, if any, of the surplus is available for dividends, is another matter.

Reserves for Retiring Bonds, Notes, etc.—Reserves for sinking funds bear many different titles in published balance sheets. The following captions appear on the liability side of balance sheets bearing the certificates of well-known accountants: sinking fund; sinking fund reserve; reserve for sinking fund; sinking fund accrued; reserve fund.

The most descriptive and correct title is "reserve for retirement of bonds." It is settled practice to use the terms, "reserve for depreciation of plant" and "reserve for retirement of preferred stock," both of which are descriptive. Usually sinking fund accounts are not descriptive. When bonds are to be retired from time to time by purchase, etc., the account should be "reserve for bond retirement"; when a fund is being accumulated to redeem bonds at maturity, the account should be a "reserve for bond redemption."

Reserves for Retirement of Preferred Stock Bear Many Different Names.—Uniformity is desirable. The most descriptive term should be used, viz., "reserve for preferred stock retirement." There is no objection to using the term "surplus appropriated for preferred stock retirement," when it does not otherwise appear that the account is a segregation of surplus.

A matter of increasing interest in connection with preferred stock issues is the obligation to retire part of an issue, usually at a considerable premium, at fixed dates, or under other conditions. In most cases these provisions are agreed to at the formation or refinancing of a company when the future prospects seem to warrant large appropriations out of earnings for the purpose of retiring preferred stock. Unfortunately, these optimistic forecasts have not always been realized, and there have been many defaults in this respect.

The question arises as to the change of status, if any, on the part of a stockholder who owns stock on which a default exists. For instance, a corporation sold $750,000 of first preferred stock, subject to a provision for the retirement of $150,000 annually after the lapse of a certain period. When the first instalment became due the corporation was unable to meet its obligation. The certificate contained no provision bearing on the treatment of the overdue payment in the accounts or in the balance sheets. The auditors declined to certify the balance sheet until a decision was reached as to whether or not the amount represented a liability to be liquidated as soon as funds were available. So long as this possibility existed the position of the general creditors was subject to change. Finally it was decided to secure an extension from all stockholders and upon satisfactory evidences thereof the auditors passed the balance sheet.

No general rule can be laid down for the auditor's guidance in such cases as this, since each case must be decided on its merits. The most important facts for the auditor to ascertain are: the rights of stockholders to insist upon payment, and the aggregates and due dates of all probable obligations. Their disposition in the accounts is then a matter of disclosing full information to creditors, prospective creditors, and other stockholders.

Reserve for Working Capital

It has been held to be legal to set aside annually or at other periods out of the earnings of a company a reasonable amount as a reserve for additional working capital, which is, therefore, not distributable in the shape of dividends. This reserve may be temporary or permanent, as the directors determine. It corresponds with the surplus of a bank or trust company, which is never used to pay dividends unless some extraordinary occasion arises. The account is a discretionary one and is almost entirely a matter of bookkeeping, or rather it is a sort of notice to stockholders that the amounts so set aside will not be distributed.

TREATMENT.—To treat such an account as a liability is a fallacy, because at any time the directors can transfer the entire balance to general surplus and pay out all or any part of it in dividends. Therefore the account should always appear on the balance sheet as a section of surplus, but never among the liabilities. An auditor should never set up an account of this nature in the books or show it on the balance sheet unless it has been formally authorized by the board of directors. It is a commendable practice to accumulate a substantial surplus, and if the directors believe that the temptation to declare dividends is less if the surplus account proper is diminished and some other account with a different name is increased, the auditor should not object. But such segregation of profits should not be attempted by an officer of a company on his own initiative.

Reserves for Dividends

Capital stock is not a liability, nor can a dividend thereon be a liability unless action has been taken and the funds have been set aside to pay it. When this is once done the action of the directors cannot be rescinded and the dividend becomes a liability.

A definite exception to this rule occurs when for any reason it is discovered that a dividend is unwise or illegal and all stockholders agree to the rescission. When the dividend has not been paid it is merely revoked as of the date of declaration; when the dividend has been paid, all of the stockholders must return the amounts received. As the revocation should in all cases be effective as of the date of declaration, it would be in order to add interest to the amounts refunded; but since the stockholders' distributable interests are not affected, it is not necessary to add interest.

When dividends are declared prior to the date of the balance sheet and are payable soon thereafter, the amount should be included in current liabilities; when declared a year in advance the amounts payable after three months may be shown separately, after the aggregate of the current liabilities is shown. Reserves are sometimes created for future dividends which have

not been declared; such reserves constitute appropriated surplus. When dividends are declared after the date of a balance sheet, but before it is published, it is desirable (but not compulsory) to mention it in the balance sheet.

Unpaid dividends on preferred stock often accumulate until paid or otherwise disposed of by compromise or other settlement. This preference, however, is a factor against the common stock only. It does not accumulate as a liability and is not deductible from the surplus, if any, which exists. In other words, a corporation may have a book surplus more than sufficient to pay accumulated preferred stock dividends, but so long as no dividend is declared by the directors it is not usual to make any book entry therefor.

Common stockholders usually have a keen interest in the value of their shares, and therefore it is not only permissible, but desirable, that any arrears of accumulated dividends should appear as a footnote or memorandum on the balance sheet. There does not seem to be any good reason against the appropriation of sufficient surplus to equal the accumulated deficiency in dividends. It does not affect anyone's legal rights and it conveys information which is sometimes difficult to secure. Otherwise, in the opinion of the author, it is permissible and desirable to set up reserves for accumulated dividends.

Investment of Surplus

Common questions with respect to the surplus account are: "Where is it?" "What asset represents it?" Anyone familiar with accounts understands that no good reason exists for attempting to earmark certain assets as representing surplus; but there is some foundation for the skepticism which exists concerning the availability of many so-called surplus accounts.

The best answer an auditor can give to these questions is to say that if the assets are not overvalued, the surplus truly exists therein; but that if any or all of the assets are overvalued, then the surplus does not exist to the extent of such overvaluation.

CHAPTER XV

THE INCOME ACCOUNT

The audit of balance sheets is not limited to the verification of asset, liability, and capital items; it is necessary to verify the item which represents the difference between the total assets as adjusted and the aggregate of the liabilities and capital. In the case of sole traders and partnerships, accounts representing the net income or deficit do not appear because they are closed into the capital accounts. Nevertheless, the accounts which are closed into the capital accounts should be scrutinized in the same manner as if the balances were left open.

In the case of corporations, the difference between total assets, and total liabilities plus capital stock, may be called "earned surplus," or "undivided profits" or "deficit"; if no item of capital surplus appears, the term "surplus" will be assumed to mean "earned surplus"; otherwise the distinction between capital surplus and earned surplus should be clearly drawn.

CAPITAL AND INCOME

The accuracy of balance sheets and of income accounts depends to a considerable extent upon the segregation of capital and income. It is a matter of greatest importance to avoid the inclusion of capital receipts in, and the exclusion of income deductions from, the income account; otherwise net worth and net income are overstated. From the standpoint of accuracy it is equally important to avoid the inclusion of income receipts in, and exclusion of capital deductions from, the capital account; the result is a misstatement of net worth and net income. From the standpoint of conservatism it is far better to charge capital items to income than it is to charge income items to capital.

When there is no doubt about the items good accounting practice does not sanction the charging of capital items to income. When a doubt exists good accounting practice sanctions charges to income rather than to capital.

It is not good practice to charge capital expenditures directly to income; but there is no objection to appropriations of net income before transferring the balance to surplus, if the transfers are clearly shown.

When the Pennsylvania Railroad Company built its New York terminal a considerable part of the cost was charged to income. The net income was first stated according to good accounting principles so that stockholders were informed regarding actual results; the proportion of capital expenditure charged against income was shown as a special item.

Form of Income Account

It is generally accepted practice to prepare income accounts in what may be called narrative form as distinguished from the account form. In the former case the gross sales or earnings are stated, deductions are made, and extraordinary items of income are added. Thus those interested are enabled to read the statement as a continuous story of what has been done. The story is unfolded so that no effort is required and no calculation need be made to comprehend each step and the final result. It is advisable to adopt uniform methods whenever feasible, particularly when comparisons with other periods and other businesses are to be made, but form must be subordinated to intelligent use and usability. It is wise to depart from prescribed forms when the story can be told better by the use of differently arranged forms.

The account form contains sales or gross earnings on the credit side of the account, and costs, expenses, losses, etc., on the debit side; the balance is brought down as net income or deficit. The account form does not lend itself to continuous reading and has little if anything to recommend it.

The auditor should direct his attention to the contents of

the income account, rather than to its form. In Chapter XX will be found examples of forms most commonly used; in this chapter the discussion is limited to the verification which must be made of the several items of income and deductions from income which appear in the income account.

Proceeds of Sale of Treasury Stock

When capital stock is donated to corporations the proceeds of sales thereof are capital. When stock is purchased in the open market and resold, the profit or loss, if any, should appear in the income account. There is, in such a case, virtually no difference between dealing in its own stock and in the stocks or securities of other corporations. It has been urged that when a corporation purchases part of its stock, it is a capital transaction because its outstanding stock is reduced and its surplus increased or decreased; if stock is purchased below par surplus is increased; if stock is purchased above par surplus is reduced. When stock is purchased or acquired for permanent holding or for formal reduction of outstanding issues, it is proper to treat it as a capital transaction; but when a corporation buys 100 shares of its own stock at $80 a share and immediately sells it for $90 a share, the gain of $1,000 is no more a capital gain than if the purchase and resale were of any other security or commodity.

Dividends Must Not Be Paid from Capital[1]

Although questions regarding capital and revenue arise in every branch of accounts, many of them are not met squarely, but are left undecided. Issue is not usually joined until the question of a dividend arises. Directors and managers who will not admit that depreciation is an operating expense, nevertheless

[1] Under federal and state income tax practice, the entire net worth of corporations as at the date of the incidence of the income tax laws is deemed to be capital. In effect all undistributed earned surplus is assumed to have been capitalized. The distinction is important from the standpoint of taxation and it is necessary to adjust books of account to conform thereto. Accounting procedure as related to taxes is fully discussed in the author's *Income and Excess Profits Tax Procedure*, 1921 editions.

hesitate before voting for or advocating the payment of a dividend before sufficient reserves have been set aside to maintain the capital intact.

AUTHORITIES QUOTED.—Thomas Conyngton, in his book on *Corporate Organization and Management*,[2] says:

Profits are the only proper source of dividends. The declaration of dividends when there are no profits is contrary to law, usually involves a personal liability by the parties responsible, and in many states involves a criminal liability as well. If an illegal dividend is contemplated, any stockholder may enjoin its declaration or payment, and, should the company become insolvent, the stockholders who receive such dividends may be compelled to make restitution.

The general rule in this country is that before dividends can be properly declared, any impairment of capital through business losses in previous years or through depreciation, must first be made good.[3] In other words, dividends must be declared out of "surplus." As it is stated in a Missouri case, "dividends can properly be declared only from the profits over and above the capital stock and the debts of the company." Before declaring a dividend the directors should examine carefully the financial condition of the company and the statutory provisions regulating the declaration of dividends in the state of incorporation.

Section 28 of the New York Stock Corporation Law provides:

The directors of a stock corporation shall not make dividends, except from the surplus profits arising from the business of such corporation, nor divide, withdraw, or in any way pay to the stockholders, or any of them, any part of the capital of such corporation, or reduce its capital stock, except as authorized by law. In case of any violation of the provisions of this section, the directors under whose administration the same may have happened, except those who may have caused their dissent therefrom to be entered at large upon the minutes of such directors at the time, or were not present when the same happened, shall jointly and severally be liable to such corporation and to the creditors thereof to the full amount of any loss sustained by such corporation on its creditors respectively by reason of such withdrawal, division, or reduction.

---

[2] Pages 399, 400.

[3] Of course impairment of capital can be made good by contributions from stockholders.

The English Companies (Consolidation) Act, 1908, contains the following provisions relative to dividends:

Table A. Section 95. The company in general meeting may declare dividends, but no dividend shall exceed the amount recommended by the directors.

Section 96. The directors may from time to time pay to the members such interim dividends as appear to the directors to be justified by the profits of the company.

Section 97. No dividend shall be paid otherwise than out of profits.

There is no material difference between this law and that of New York State. In neither jurisdiction is it permissible to pay a dividend unless the capital is unimpaired. Where the assets *have* depreciated in value and the depreciation is not provided for out of earnings, the capital is impaired.

Case of Interborough-Metropolitan Company.—The heavy losses of the Interborough-Metropolitan Company of New York on its holdings in the Metropolitan Street Railway created a very large deficit. In some states it has been held that yearly profits may be distributed irrespective of shrinkage in capital assets, but in New York the question has not been judicially determined. Although the current income of the Interborough-Metropolitan Company from its holdings of stock of profitable subsidiaries had been large enough to justify dividends, it was considered unwise to pay dividends so long as the large deficit remained. Thereupon the Interborough-Metropolitan Company was absorbed by a new company which had a much smaller capitalization. Upon the exchange of the stock of the old company for that of the new company, the latter immediately commenced the payment of dividends.

American Malting Case.—Many corporations exist whose dividends are being paid or have been paid out of capital. If stockholders appreciated their rights, many directors would be called to account. The most notable example of this practice in

the United States is the American Malting case.[4] If an auditor disagrees with a board of directors over the allocation of items to capital or revenue, he may find it salutary to request them to read extracts from this case.

CONTRIBUTED SURPLUS.—Repayments of contributed surplus are not dividends but distributions of capital. Likewise, distributions of an excess secured solely by reductions of capital stock are a distribution of capital. For instance, taking a corporation whose assets are $250,000, liabilities $100,000, and capital $300,000, there would be a deficit of $150,000. Should there be a reduction of capital amounting to $200,000, the deficit of $150,000 would be eliminated and a surplus of $50,000 would be created. This surplus would not represent surplus profits arising from the business, and a distribution of such surplus could not be considered as a dividend.

Wasting Assets

It is permissible for a mining company to pay out in dividends all realizations from its operations, but its stockholders are on notice that the capital of the company is being dissipated. On the other hand, if a steel company owns ore lands it must not treat the entire proceeds from ore sales as net income, but is obliged to allocate the realizations between capital and income. The capital must be kept intact in order that it may not be depleted. The net income may be distributed in dividends.

Decedents' Estates

The distinction between principal and income is even more important in some trust estates than it is in ordinary commercial enterprises. The misapplication of an item may affect the ultimate solvency of a commercial enterprise, but in estate accounting the decision of a court as to whether a dividend is principal or income may deprive a beneficiary of the necessities of life.

---

[4] *Hutchinson v. Curtiss*, 45 Misc. Rep. 484; 92 N. Y. S. 70.

For a full discussion of the questions which arise in the audit of the accounts of decedents' estates, see Volume II.

Importance of Uniform Terminology in the Income Account

Inspection of annual reports issued during 1921 by many well-known corporations, containing balance sheets and income statements prepared and certified by equally well-known public accountants, proves beyond a doubt that there is a great lack of uniformity in terminology regarding the items of income and expenses. At one time the author believed that the trend of good accounting practice was towards the term "profit and loss account"; but at the present time the use of other terms is as frequent, showing that there was no trend in any direction—the lack of uniformity merely continued. The terms "profits," "income," "revenue," and "earnings" are used synonymously at times and at other times a distinction is drawn; but there is no uniformity in the distinction, so that it increases the confusion to differentiate.

Comparing Results.—One result of the lack of uniformity in accounting terminology is the difficulty, and in some cases the impossibility, of comparing the results of one concern with those of another. In a banker's circular issued in May, 1921, reference was made to the finances of an oil company. On one page of the circular "net earnings" for 1920 were stated to be $35,000,000 and "income available for surplus and reserves," $30,000,000. On that page there was no indication that depreciation and depletion had not been provided for, but on another page "surplus income after depreciation" appeared as $18,000,000. The text stated that "net earnings before depreciation" were $30,000,000. The audited accounts published in March showed "net earnings" $35,000,000, from which were deducted interest and federal taxes $5,000,000, leaving "income available for surplus and reserves" $30,000,000. The balance sheet (not the income statement) contained an analysis of surplus from which it

appeared that the reserve for the year for "depletion, depreciation, and amortization" was $12,000,000, but the item appeared nowhere else. The term "income available for surplus and reserves" would not as a rule be interpreted to mean that depreciation and depletion were among the reserves to be provided for. The author's impression following the first reading of the circular was that the net income greatly exceeded the amount which a more careful reading disclosed to be the actual net income. It should not be assumed that the casual investor is a careful or capable analyst. Bankers' circulars should state actual net results; if there are extraordinary deductions they can be explained in the text. In another banker's circular, what purported to be a favorable statement was supported by an income statement in part as follows: "Net income after depreciation; available for interest, tax, and inventories adjustments." The items excluded obviously were substantial, but the totals were not shown. Failure to tell the whole story is misleading to investors no matter how excusable the intention may be.

Net Profits versus Net Earnings.—The term "net profits" is not always used as synonymous with "net earnings." In practically all cases depreciation is deducted before arriving at "net profits" but is not always deducted in arriving at "net earnings." Therefore, in making comparisons it is not feasible to compare the "net earnings" of one concern with the "net earnings" of another even though they are engaged in the same kind of business and are audited by reputable accountants. It is not charged that attempts are being made to mislead, but most laymen find it difficult to understand financial statements and they should not be further confused by terms to which different meanings are ascribed.

Terms to Be Employed.—Accountants should agree on terms which describe similar items. If a concern "makes money" after allowing for all accrued costs and expenses, the net result should be represented by one term, not by any one of three or

four. The author had an open mind on the subject and was willing to adopt a term which is most frequently used by leading accountants; but an extensive investigation proved that no term had a majority, so there was no selection. Driven to another method of selection, the author decided that the term most often used by the Supreme Court of the United States might be satisfactory. It is a logical selection because income and profits taxes are based on the distinction between capital and income. It is rather foolish to struggle over the distinctions between the words "profits," "earnings," and "revenue" when the amount to be determined must immediately be referred to as "net income." Is it not logical to adopt the terms "income statement," "gross income," and "net income," and discard *all* other terms which mean the same thing? The courts for centuries have differentiated between, and defined, capital and income; the Sixteenth Amendment to the Federal Constitution permits Congress to levy taxes upon "incomes, from whatever source derived." Congress has passed several acts imposing taxes upon net income and provides that the term shall include "gains, profits, and income." The words "earnings" and "revenues" are not included, but the words used are broad enough to cover all income—no matter what it may be called. The Supreme Court of the United States has decided that profits derived from the sale of capital assets are income within the meaning of the Sixteenth Amendment to the Constitution. If it is of great importance to determine "net income" for tax purposes, why not simplify accounting procedure and define the term for general use? The committee on stock list of the New York Stock Exchange, in its published requirements for original listing, uses the term "income account."

The accounting distinction between capital and income is not affected by tax legislation. It is possible and proper that a different rate of tax should be imposed upon capital gains and net income. The probability of such a distinction in a tax measure merely emphasizes the importance of differentiating between the two in books of account and published statements.

The use of the term "gross income" for gross sales and operating revenues (gross) offers some difficulties; for example:

U. S. Treasury includes in "gross income" the excess of gross sales over cost of goods sold.[5]

Interstate Commerce Commission uses "gross income" as the aggregate of operating income (operating revenues less operating expenses and taxes) and non-operating income. It is the item immediately preceding the "deductions" for rentals and interest.

DEFINITION OF "GROSS INCOME."—The term "gross income" means accruals (as distinguished from cash receipts) from all sources, such as sales, rentals, and interest; profits derived from the sale of capital assets, and the excess of previously created reserves over the ascertained needs for such reserves.

The term should be divided into three parts:

1. Current gross income, to be called "operating income" or by any similar title. Current gross income includes: gross sales, which means all sales delivered or to which title has passed to the vendees, from which there have been deducted returned goods or goods to be returned, trade, quantity, and similar discounts, and all allowances which would have been deducted from the sales prices if known at time of invoicing, such as those due to changes in prices, damaged goods, and shortages.

2. Gross income accrued or realized from other sources, such as dividends, interest, profits arising from sale of capital assets, surplus reserves and extraordinary items affecting prior periods.

3. Unrealized income, if any, arising from increment in values from undelivered sales or similar sources. Provision for this group does not carry with it any implication that unrealized appreciation should be carried to the income account. The chief reason for the grouping is that in some industries and in some concerns the practice is more or less common. If, as and when it

[5] See Form 1120.

is found the amounts must be segregated and not included in groups (1) or (2).

From (1) above may be deduced the following definitions: the term "gross sales" means the aggregate value of the goods or services delivered or rendered within a given period, without regard to the collection of the proceeds; the term "net sales" means gross sales less any deductions for returns, allowances, or discounts in excess of 2 per cent. Losses arising from bad debts, or reserves therefor, are not included among such deductions but should appear as a separate item following administrative expenses. Allowances which are of the nature of compromises and which are not recognized as valid claims (when it is possible to draw the distinction) should not appear among the deductions but should be included in either sales or administrative expenses, depending upon the nature of the deduction.

Collections for Fire Losses.—If amounts collected for fire losses have been included in the sales, such items should be excluded and proper entries made through the purchase accounts instead, since the fire loss is in many respects equivalent to return of the merchandise. If the amount received from the insurance company is either more or less than the cost of the goods, the difference should be passed through the income account as a separate item.

Definition of Net Income.—The term "net income" means the balance of income remaining after deducting from gross income all costs, charges, and expenses (including items accrued but not paid and losses arising from the sale of capital assets).

The deductions from gross income should be divided into classes:

1. Current charges against income, such as cost of goods; cash discounts; allowances not fairly deductible from sales prices; selling, general, and administrative expens-

es; bonuses to officers and employees;[6] bad accounts and reserves for doubtful accounts; adequate depreciation (when not included in cost of goods), depletion and ordinary obsolescence (if there is such a thing); insurance; proportion of deferred charges carried over as applicable to the current period (if not absorbed —as they should be—in the accounts to which they relate); property and similar taxes paid, accrued or estimated;[7] and any other charges and expenditures properly chargeable to current operations.

2. Deductions from gross income for interest paid and accrued on borrowed money (but not interest on capital), federal and state income taxes, accrued or estimated.
3. Losses arising from sale of capital assets, and other extraordinary items affecting prior periods.

TAXES.—The deductions shown under (2) should include all income taxes. A New York corporation cannot claim to have accumulated any net income in any year until provision is made for taxes accrued or payable to the United States and to New York State, based on net income for the same year. It is true that federal taxes are based on "net income," but the taxes are based on net income before federal taxes; the net income which remains after taxes is the true net income of the business. The term "net income," when used without qualification, means what

[6] When an employee is entitled, under contract, to a share in the net income of a concern, the contract should define the term "net income" so far as doubtful items are concerned. These doubtful items are interest on capital. reasonable salaries to the owners, depreciation, depletion, obsolescence, and income and profits taxes. If the term is not defined in the contract, good accounting practice would be deemed to permit the deduction from net income of reasonable depreciation and other reserves, salaries, but not interest on capital or income or profits taxes. It is entirely proper to specify in a contract that income taxes and interest shall be deducted before net income is determined, but if the provision is not made the employee is entitled to the benefit of the doubt. The exclusion of profits taxes is somewhat arbitrary; but an item which varies in a few years from nothing to 80 per cent, cannot be dealt with as an ordinary expense of the business, it is payable only on what remains after an allowance is made for a so-called reasonable return on invested capital

[7] See page 330 for discussion of this point.

is left for the stockholders from the operation of a business. The argument cannot successfully be sustained that there would be any net income accruing to a corporation until all taxes, including federal taxes, were deducted. This principle holds good whether or not the taxes or other charges have been paid.

If the deductions exceed the gross income, the balance should be called the net loss or deficit for the period. The term "net loss" is often applied to specific losses as well as to losses for entire fiscal years; therefore the term "deficit" is more descriptive, but it is not in general use.

Treatment of Net Income.—It is proper to show deductions from gross income, but there should be no deductions from net income except extraordinary items of substantial amounts which have no relation to the current period; every effort should be made to avoid this class of deductions. The amount of net income should be transferred to surplus. No charges should appear in surplus except charges for dividends and deficits, and no credits except credits for net income.

Blue-Sky Laws.—Many of the so-called "Blue-Sky" laws of the various states stipulate that the net income of the corporations whose securities are to be offered must equal a stated minimum. The provisions are general in their nature and will be interpreted according to good accounting practice. The intention is practically the same in each law, but there is no uniformity in terminology. Terms frequently used are: a fair return; net profits; net earnings; earning power; gross income, less expenses and fixed charges; receipts and disbursements; gross and net earnings, actual or estimated; a profit; earnings.

The foregoing terms will be construed more or less strictly; therefore the intention of the legislators may be frustrated because they use terms which probably will be interpreted to mean something different from that intended. The use of the terms "gross income" and "net income" would accomplish the intended result in every case.

Importance of Income Account

A balance sheet audit is only partially completed with the verification of the assets and liabilities. The income account supplements the balance sheet and reflects the changes that occur in the real accounts during the accounting period. It follows that a thorough balance sheet audit cannot be made unless due attention is paid to those accounts which are periodically closed into profit and loss, and which afford data for constructing the income account.

At least nine-tenths of all the enterprises with which a professional auditor has to deal are conducted with the expectation of realizing a profit. Certainly more than half, and probably three-fourths, of these enterprises have their accounts stated and results shown in a form to which a professional auditor cannot certify without modification or adjustment. That is to say, most concerns state their income accounts incorrectly.

In view of the fact that there is scarcely any likelihood that two professional auditors today would, with respect to the accounts of an undertaking of any considerable magnitude, show the same net result of profit, it is not surprising that the usual income account is prepared upon a basis which admits of criticism. It is extremely important that an effort be made to establish standards which will appeal to those responsible for the stating of accounts as scientific and reasonable. The latter term may seem out of place, but it must be understood that rules which are purely theoretical will not be observed.

It is not enough to know that the net income or deficit for a particular period is a certain sum. All who are interested in the enterprise desire to know the particulars of the net result, and the auditor who states the transactions in an intelligent, scientific, readable way is the one who finds favor with business men. The auditor who familiarizes himself with the legal as well as the economic aspects of income and expense accounts is best prepared to analyze accounts properly and to present the results so that the relation of certain figures or groups of figures will convey all that they should convey.

Relation of Net Income to Price-Fixing

There is a decided trend towards price-fixing by governmental bodies. For many years it has been recognized that public utilities, being in the nature of monopolies, may properly be limited to a fair return on capital invested. Unfortunately, hostile and demagogic politicians have destroyed the attitude of fairness which should characterize the treatment of corporations which furnish service to the public. Power is inherent in the legislature to reduce exorbitant rates, but permission should be given to raise rates when costs of operation increase.

Price-Fixing Tendencies.—Government power to regulate has been extended in some states (and by Congress in the District of Columbia) to rents and to the necessities of life. Here, too, the regulation is one-sided; when so-called profiteering is charged, prices are arbitrarily reduced; when prices are below cost no remedial measures are suggested.

In 1920 many sugar companies were charged with making unconscionable profits; in 1921 all companies were compelled to sell below cost. Labor unions have suggested that wages be based on profits, and the proposition seems fair enough; but when labor unions have had any say they have insisted that prices be unduly increased so that wages could be inflated.

Inequalities in Price-Fixing.—During the World War it was necessary to fix the prices of those commodities for which the demand was greater than the supply, in order to prevent runaway markets. In all of the foregoing cases the basic questions were, "What fair and reasonable net income is an industry entitled to?" and, "What prices produce such fair net income?" In a vast number of cases neither question was satisfactorily answered because trustworthy statements of net income were not available. In many cases the lack of trustworthy statements was due to faulty accounts; in more cases the failure was due to an astounding lack of uniformity in the presentation of financial re-

sults.[8] Who is to blame? The truth of the matter is that, outside of regulated concerns such as public utilities and a few industries which have adopted uniform income accounts, the proposition of income accounts is a hit-or-miss (usually miss) affair in which the personal inclinations of those responsible for them play the most prominent part.

There has been little improvement in this respect during the last ten years. It is true that depreciation is now provided for more than formerly; but it required high tax rates to influence many concerns. There must be more general agreement on the meaning of the term "net income" or public sentiment which is now running against governmental price-fixing will react in its favor. If business concerns do not set their accounts in order and render periodical statements which unequivocally show true net income so that anyone reasonably familiar with accounts can compare one concern with another, and the net income of all representative concerns in any industry, it is quite possible that restrictive and annoying legislation will be passed which will require the publication of uniform statements.

Legal Definition of Net Income

The courts in various jurisdictions have defined "income," "net income," and "net profits" available for dividends, in so many ways that an auditor or corporate officer who desires authority for any position which he wishes to assume can usually find it in the law reports.

Courts have held that a dividend may be declared out of the net income of one year although a large deficit is carried over from previous years; they have also held that "past-due floating debt should be paid or funded before a dividend is declared." Nearly every conceivable situation between these extremes has been held to be both legal and illegal, depending on the judge deciding the case.

[8] The author was a member of the general price-fixing committee of the War Industries Board. This statement is based on his personal inspection of thousands of income accounts submitted as bases for price-fixing.

CASES CITED.—In many decisions net income is defined and the ludicrous definitions and comments in themselves explain why it is that the courts vary to such a great extent in settling disputes which involve accounts. The fact is that judges, who are trained as lawyers, understand as little about accounts as do the members of the bar. The adage, "A little knowledge is a dangerous thing," has its exemplification in the treatment by lawyers of questions of accounting. They have the temerity to settle matters of the greatest importance, involving complicated accounts, without any evidence that anyone who understands accounts has been consulted in the settlement. Occasionally the departure from the usual legal comment is so great that it is worth placing on record. The court said in one case:

> If at the end of the first year the line of railway is still in so good a state of repair that it requires nothing to be laid out on it for repairs in that year, still, *before you can ascertain the net profits*, a sum of money ought to be set aside as representing the amount in which the wear and tear of the line has, I may say, so far depreciated it in value that that sum will be required for the next year or next two years. I should think no commercial man would doubt that this is the right course—that he must not calculate *net profits* until he has provided for all the ordinary repairs and wear and tear occasioned by his business. That being so, it appears to me that you can have no net profits unless this sum has been set aside. When you come to the next year, or the third or fourth year, what happens is this: as the line gets older the amount for repairs increases. If you had done what you ought to have done, that is, set aside every year the sum necessary to make good the wear and tear in that year, then in the following years you would have a sum sufficient to meet the extra cost.

The following definitions are taken from the decisions of federal courts:

> It (income) must, by certain attributes, be distinguished out of the mass, or from other things with which it is compared . . . . Receipts and accumulations of a business corporation are of two classes: one, those which constituted its gross income; and the other those which represented the sale or conversion of its capital, and the controversy has always been

as to the respective definitions of those two classes. We accept this as the rightful criterion.[9]

The meaning of that word (income) is not to be found in its bare etymological derivation. Its meaning is rather to be gathered from the implicit assumptions of its use in common speech. The implied distinction, it seems to us, is between permanent sources of wealth and more or less periodic earnings. Of course the term is not limited to earnings from economic capital; i.e., wealth industrially employed in permanent form. It includes the earnings from a calling, as well as interest, royalties, or dividends, though in the case of corporations this may be of slight importance.[10]

"Net income" imports a "gross income," and the difference between the two implies the expenditure of income for some corporate purpose, as that of "carrying on or doing (the) business" for which the corporation is organized.[11]

We must reject in this case . . . the broad contention . . . . that all receipts—everything that comes in—are income within the proper definition of the term "gross income," and that the entire proceeds of a conversion of capital assets, in whatever form and under whatever circumstances accomplished, should be treated as gross income.[12]

"Net income," of course, means gross income after deducting all outgo necessarily incident to the business.[13]

Whatever difficulty there may be about a precise and scientific definition of "income," it imports, as used here, something entirely distinct from principal or capital either as a subject of taxation or as a measure of the tax; conveying rather the idea of gain or increase arising from corporate activities. As was said in *Stratton's Independence v. Howbert*, 231 U. S. 399, 415; 58 L. Ed. 285, 292; 34 Sup. Ct. Rep. 136: "Income may be defined as the gain derived from capital, from labor, or from both combined."

Understanding the term in this natural and obvious sense, it cannot be said that a conversion of capital assets invariably produces income. If sold at less than cost, it produces rather loss or outgo. Nevertheless, in

---

[9] Denison, Circuit Judge, in *Biwabik Mining Co. v. U. S.*, 242 Fed. 9.

[10] Learned Hand, District Judge, in *U. S. v. Oregon-Wash. R. & Nav. Co.*, 251 Fed. 211.

[11] Woolley, Circuit Judge, in *Lewellyn v. Pittsburgh, B. & L. E. R. Co.*, 222 Fed. 177; 137 C. C. A. 617.

[12] Mr. Justice Pitney, in *Southern Pacific Company v. Lowe*, 247 U. S. 330; 62 L. Ed. 1142.

[13] Holt, District Judge, in *Forty-Two Broadway Co. v. Anderson*, 209 Fed. 991.

many if not in most cases there results a gain that properly may be accounted as a part of the "gross income" received "from all sources"; and by applying to this the authorized deductions we arrive at "net income." In order to determine whether there has been gain or loss, and the amount of the gain, if any, we must withdraw from the gross proceeds an amount sufficient to restore the capital value that existed at the commencement of the period under consideration.[14]

Economic Definition of Net Income

In discussing profits the *Encyclopedia of Accounting* states that from an economist's point of view profit consists of the surplus remaining over from the employment of capital after defraying all the necessary expenses and outlays incurred in its employment, and after the capital has been replaced or provision made for its replacement. If there are not sufficient assets left to replace the capital, the result of the venture or employment is a loss and the amount by which the capital is diminished is the measure of this loss. Profits are arrived at by means of balance sheets which show the true financial position of the concern, supplemented, where the books are properly kept, by an income account.

For example, the profit of a company for the first year is the excess of assets over liabilities (including in the latter the paid up capital), while there are exhibited in the income account the sources from which the profits have arisen. The profit for any period is the increase in the excess of assets over liabilities at the end of the year, as compared with the excess of assets over liabilities at the beginning of the year.

Accountant's Definition of Net Income

If a public accountant were asked to define the term "net income," he would probably reply: "The net income of a business is the surplus remaining from the earnings after providing for all costs, expenses, and reserves for accrued or probable losses."

---

[14] Mr. Justice Pitney, in *Doyle v. Mitchell Bros. Co.*, 247 U. S. 179.

CAPITAL VERSUS REVENUE.—There are capital profits and revenue profits. Thus, for instance, part of a tract of land upon which a factory has been erected is sold for an amount equal to the original cost of the entire undertaking. This is realized income, but it does not fall within the ordinary definition, therefore it is not wise to rely exclusively upon any one definition. The net income from a man's vocation is revenue profit; the net profit realized from an outside venture is capital profit.

NET INCOME.—As stated on page 278, the author believes that the word "surplus," other than capital surplus and the surplus of banks, should be used only to designate an amount available for dividends. The term "net income" should be used only to designate the amount arrived at by stating the income actually accrued during a stated period, collected or collectible, less the cost thereof actually paid, and less further costs accrued but not paid, such as depreciation, obsolescence, taxes, and other charges apportioned against the income, such as reserves for strikes, workmen's pensions, etc. Reserves for working capital, unknown contingencies, etc., are not costs, but reservations of profits, and so are not to be considered in determining net income. If absolutely accurate balance sheets could be prepared at the beginning and at the end of a period, the difference between their surplus accounts (withdrawals, dividends, and reservations being considered) would represent the net income or deficit for the term; but the valuation and revaluation of capital assets involves too much speculation to permit the recognition of such practice as satisfactory. This, in effect, is the method used to secure results in single entry, but its utter failure to justify itself is reason enough for abandoning it.

EXPENSES OMITTED.—A business man wants to know his gross earnings for the year, also all of the costs and expenses which are properly chargeable thereto. Naturally the net result, whether a profit or a loss, coincides with the changes in the balance sheet at the beginning and the end, exclusive of capital receipts or expendi-

tures during the period. But the business man does not always think that; sometimes he wants to have the gross earnings stated and to have made as few deductions therefrom as possible, in order to show favorable results. He may be willing to create a reserve for depreciation on the books and in the income tax returns, but he does not always want it to appear in the statement which he shows his banker. He does not consider that the income account, as he would state it, taken in connection with his balance sheets, would be inaccurate on its face. The professional auditor, however, is under a much greater responsibility. He cannot afford to prepare an income account which omits any material item. Just what should be included and what excluded will now have our attention.

CHAPTER XVI

THE INCOME ACCOUNT—REVENUES

In a balance sheet audit it is not expected that the auditor will attempt to certify that all of the gross income for any period which should have been accounted for *has been* accounted for. The verification of the income account can hardly extend beyond tests and scrutiny which consist largely of analyses and comparisons. The segregation of gross income into appropriate classes and the relation of the classes to previous results, to costs, and to net income is a comparatively simple task when accounts are well kept. Unusual or suspicious results demand further investigation. When accounts are not well kept or when the internal audit is inadequate, the auditor must remind the client of the limitations of a balance sheet audit so far as the income account is concerned.

In this chapter will be discussed a few income account matters which require attention in balance sheets audits.

Gross Income

It is customary and desirable to show the gross business transacted, whether arising from sales of goods, or from services rendered by professional men and others, or by public service corporations or similar enterprises.

Returns

Where earnings arise from the delivery of goods and for any reason the goods are returned, the aggregate returned is usually deducted from the gross income before stating same. The reason for this is that, if the goods are returned and credited at the same price at which charged, and are available for resale, it is improper to augment the sales by transactions never consummated, thus render-

ing the calculations of gross profits, etc., less valuable. This is the general rule, but if it is desired to have the returned sales shown as a deduction from the gross sales, there is no objection to such procedure. It may be of interest as a means of showing whether or not the proportion of returns to the total volume of business is proper.

Returns and Falling Prices.—In verifying income from sales the auditor is chiefly concerned with the possibility of the return of shipments made immediately before the date of the balance sheet. In a time of falling prices the point is an important one because buyers do not hesitate to return goods which have been ordered and shipped under firm contracts. Even though goods have been returned and accepted, the buyer is not released unless the seller acquiesces in the transaction; if the right to return is questioned the legal position of the seller is quite as strong as if delivery from the transportation company were refused. It is an unnecessary expense to leave goods in the hands of carriers pending the settlement of disputes.

Sales of Consigned Goods

The profit on goods sold to consignees is income to the consignor for the period in which the sales are made, even though consignors do not receive notices of sales until subsequent periods.

Ordinary Transactions Only to Be Included

It should be noted that the only earnings which should be shown in the first division of the income account are those which are incident to the normal operation of the business. All other earnings should be excluded from this division. This should be done because the relation of one account to another, both for immediate observation and for future comparative purposes, must be expressed in percentages and amounts and because the inclusion of any item outside the ordinary scope of the enterprise affects these percentages and amounts and thus diminishes their value for purposes of comparison.

Allowances and Rebates

These are the next deductions and are also direct, except that separate ledger accounts should be kept therefor, unless the items are few in number and small in amount. Whenever the aggregate is a material percentage of the gross sales, and therefore subject to comment and possible criticism, it should be shown on the statement.

It is not always easy to determine the distinction between allowances which represent true deductions from gross sales and those which should be included among costs or expenses. In the retail automobile business it is customary to accept used cars in part payment for new cars. The used cars usually realize less than their nominal cost. On the face of the transaction the dealer sells a new car for $3,000, allows $1,000 on a used car, and collects $2,000 in cash. He sells the used car for $800. Under good accounting practice, the apparent loss of $200 (plus expenses of resale) should be shown as a deduction from the gross sales price of the new car, rather than as a loss arising from the sale of a used car.

Doubtful Accounts

The earnings just referred to are gross and are so stated whether or not they are realized in cash or its equivalent. The question arises as to whether an allowance, or reserve, for doubtful or bad accounts should be considered at this stage and be deducted direct from the gross earnings, or whether it should be treated as an expense of administration or selling and be included in one of these groups. The proper place is in that group which contains the cost of collecting the proceeds of the sales.

The Credit Department.—One concern may decide to take its chances on the acumen of its salesmen and so maintain no credit department. The proportion of bad accounts may be fairly large, but not large enough to warrant the expense of maintaining a competent credit force. Another concern in the

same line of business may have a well-equipped credit department and its losses from bad accounts may be very small; but the cost of maintaining its credit department must be grouped with its bad debts losses if an intelligent comparison with the other concern is desired. For these and other reasons the provision for bad accounts should not be deducted directly from the gross earnings.

THE RESERVE.—The reserve for bad debts, however, should be deducted from the accounts receivable on the balance sheet. It is not a liability and should not be placed among liabilities or on the liability side of the balance sheet. The use of the word "reserve" to designate the amount charged as an expense to cover losses arising from bad accounts is confusing to many persons. It may in some cases, therefore, be better to use some such expression as, "provision for doubtful accounts," in place of the more formal expression, "reserve for bad debts."

TAXATION.—Bad accounts should be written off in any event; but the point is of particular importance in determining tax liability. Up to this time the federal government has refused to permit the deduction of tax reserves, allowing only the amounts actually charged off on the books.

Income from Work in Progress

Earnings which are represented by completed transactions with trade debtors must be clearly distinguished from those earnings which are represented by transactions only partially completed, the results of which are in doubt. Except in unusual cases, no profit should be taken unless a cause of action has arisen which can be enforced against the debtor. In other words, if work in progress cannot be earmarked as being for a definite customer, or if it has not proceeded far enough to form the basis of an action, it must be taken into the inventory and valued as an inventory item and not as an account receivable. Ordinarily no profit or loss thereon should appear in the income account

except when there is a definite change in values at the date of the balance sheet and accuracy demands a revision. If a revision is justified the result thereof must appear as a separate item; it must not be merged with realized income.[1] But if work is undertaken "on order" and is proceeding satisfactorily, and if it is apparent that the estimated profit thereon will be realized, more or less, then it is permissible to take credit for the proportion of profit earned to the date of the income account.

Anticipating Profits.—Ordinarily, on the theory that profits must not be anticipated, this principle is not considered a conservative one. In trading concerns orders are frequently taken far in advance, and goods in an inventory may have been sold and are simply awaiting delivery. Accounting authorities have in the past agreed that the profit on such sales should be deferred to the period in which delivery is made. It may be pertinent to inquire why accounting authorities agree that a profit can be taken on contracts only partially completed and with many contingencies to face, any one of which may delay or prevent the fulfilment of the contract according to its terms and oppose anticipating the profit on manufactured goods sold and not delivered. Perhaps the best and frankest answer to this argument is that expediency governs one case, while the other practice of deferring profits almost but not quite realized is due to conservative commercial practice.

Under ordinary conditions the author does not believe that profits on undelivered sales should be anticipated. Most concerns which sell ahead have a fairly constant and uniform business so that no statistical problem arises when sales expenses are charged to one period while the following period reaps the benefit thereof. But a shipbuilder may have a dozen jobs under way at the end of one fiscal period, while he may have six or eighteen jobs under way at the end of the next period. If he takes up the profit on completed jobs only, his books may show a state of

[1] See rules for inventory valuations, page 144.

affairs vastly different from the facts. His most prosperous year may easily show up as the worst. The same is true of contractors in the building and other trades.

It may be urged that the taking of a profit on uncompleted work is an extreme example of the practice of anticipating earnings, a practice which is condemned throughout this book. This is admitted. It should be borne in mind, however, that when there are inventories and similar assets exist, the closing of the books is necessarily based on estimates. Many serious mistakes have been made in fixing valuations on real estate and stock-in-trade.

Use of Estimates.—The necessity of closing at a fixed date each year may require the use of careful estimates. A contractor who over a period of years carefully estimates the value of work in progress and who conservatively estimates his profits thereon, arrives at figures quite as trustworthy as are secured in a business whose units of production are smaller and which does not anticipate profits. Experience in dealing with contractors' accounts soon enables the auditor to verify, at least approximately, the accuracy of the figures submitted for work in progress.

Fixed Percentage Basis.—Recently, the practice of having work done at a maximum profit or upon a fixed percentage has been extended to much work which formerly was undertaken for a round sum. In such a case the profit is determined by the amount of the work completed and may be taken into account in the same manner as with professional earnings.

Circumstances Determine Policy.—If the units of production are small and if the time of completion is comparatively short, and when there are no substantial fluctuations in prices, there is no sanction for including any profit whatever in the inventory prices of unfinished goods. Under a very accurate and carefully kept cost system it may be possible to arrive at the cost price of work in progress. The auditor should ascertain that the

principles upon which the costs have been calculated are correct and should also satisfy himself that the quantities have been checked and certified to by responsible parties.

Departmental Profits

It is held by some accounting authorities that when the product of one department of a business is completed and is turned over to another department, the originating department may take credit for its production at the market price, and if the market price is in excess of its cost, a profit is earned and may be taken into account immediately.

Stages of Manufacture.—It is pointed out that in some concerns there may be, say, four distinct stages in the manufacturing process between raw product and finished goods. Other and competing concerns have but one, two, or three of these stages, so that what is an intermediate stage for one is raw material for another.

For instance, a steel manufacturer mines his own ore and manufactures his own pig iron. A competitor purchases all of his pig iron. The former's iron costs $10 per ton; the latter, having to buy on the market, is not able to secure iron under $12 per ton. The iron is used to manufacture identical products. At what price should the former concern charge the department to which the iron is delivered? If at $10 per ton, the manager is credited with having a lower cost of production than his competitor, although the latter may, in fact, be more efficient.

Book Profit.—So far the argument is a strong one, and the point is conceded, provided the interdepartmental profits are suspended until the product is finally disposed of. But if they are not thus suspended, a concern manufacturing its goods from the first stage to the last may find itself in possession of a large inventory of manufactured goods and a large apparent book profit and yet be wholly unable to convert this book profit into cash.

In order to reflect actual values for comparative purposes and in order to determine the efficiency of different departments, it may therefore be permissible to adjust costs to market prices, provided that in all cases such intermediate profits are held in reserve, and this reserve is clearly shown on the balance sheet, until there has been a conversion into cash or its equivalent.

Conclusion.—A complete answer to the demand for an earlier disposition of these profits is: The purpose of organizing an enterprise which includes various stages of manufacture is to produce a given article finished for market at the lowest possible price, and the more numerous the stages covered, the lower is the cost. This is not the case when credit is taken for a series of profits throughout the process of manufacture, since this obscures the actual cost of the finished article.

Intercompany Profits

In recent years there has been a tendency to concentrate production. Consequently, this same problem arises with respect to intercompany profits. In the case of intercompany transactions the principle applied to interdepartmental income should be observed.

The Correct Procedure Illustrated.—Some large industrial enterprises control several or all of the processes of manufacture of one or more products. Frequently the various processes are performed by plants which are entirely distinct units operating under their own individual charters. As a consequence frequent sales and resales are made, with the result that profits are shown on intercompany sales and quantities of merchandise appear in the inventories at prices greater than actual cost. It is now generally recognized as good accounting practice to eliminate all intercompany profits and the corresponding excessive inventory valuations from statements which purport to show the true financial status of the group of related companies. The United States Steel Corporation, for example,

in its consolidated balance sheet, lists its inventories of products on hand which have been sold and transferred from one subsidiary company to another, at net value, i.e., substantially the cost of production to the companies which furnish the products.[2]

The foregoing represents sound, conservative accounting and should be followed by every corporation which desires to allow the future to reap the benefit, if any, of future transactions, rather than to sell goods to itself at a profit.

Income from Sales for Future Delivery

As mentioned under "Income from Work in Progress,"[3] it is customary in many lines of business to solicit and accept orders for future delivery. If the expenses of taking the orders have been incurred and if the goods themselves are on hand ready for delivery, it may seem ultra-conservative to advocate waiting for actual shipments before taking credit for the profit thereon. Nevertheless, this practice is generally followed by successful concerns, whereas the unsuccessful business man, in his attempts to bolster up a tottering business, usually anticipates every profit in sight and forgets the accrued expenses.

Danger of Cancellations.—Theoretically, if goods have been sold and are ready for shipment and if the terms of the order permit immediate shipment, it may be assumed that a cause of action has so nearly arisen that no great harm can follow if the goods are entered as a sale, accounts receivable are debited, and the income account increased by the profit. But every business man knows that up to the instant of shipment, and sometimes afterwards, cancellations are received and accepted, or that a fire or some other contingency may prevent the consummation of what appears to be a sure thing. Under normal conditions the conservative business man does not, and will not, anticipate the

[2] See Wm. M. Lybrand, year book of the American Association of Public Accountants for 1908, page 255; also the annual reports of the United States Steel Corporation.

[3] Page 314.

profits on goods ordered but not shipped; the conservative auditor will not certify to accounts which are prepared on any such basis.

In a going business it is assumed that orders are in hand for future delivery, and when prices are reasonably stable the profit on such orders should appear in the period during which deliveries are made. In such cases inventories are valued at original cost, which is the same as replacement cost; therefore balance sheets are not affected. When replacement costs are greater or less than original cost, succeeding periods, as well as balance sheets, are unduly affected, unless adjustments are made as at the date of the balance sheets.[4]

Participations and Underwritings

During recent years bankers have extended the privilege of participating with themselves in underwritings and purchases to a considerable number of investors and others. It is therefore not unusual to see some reference to such participation in books of account.

Perhaps a majority of underwritings yield a net income to participants, but many wind up with a loss. Interim accounts are reports of progress only and may be founded on the quotation of a supported market, so that it is most unsafe to take into account any income at all until it is realized in cash.

This rule applies with equal force when securities of a new corporation are distributed as a bonus. There may be a market price which seemingly insures a handsome profit, but such quotations may be nominal only. The sale of a part of the participation at a profit on the purchase price should be applied against the entire purchase in order to write down its book cost. This is based on the same principle, viz., that the market may be a fictitious one and therefore is not to be depended upon.

Income Arising from Sale of Capital Assets

It may be that a profit has been realized from the sale of a portion of the fixed assets of a concern. Legally this profit may

[4] For discussion of this subject, see page 160.

be carried to surplus and distributed as a dividend, but such a course is apt to create a false impression on stockholders. It is much better to carry such an item to an account such as capital surplus, whose caption indicates the character of the entries therein, and which may be carried on a balance sheet as a separate section of the surplus account. Under such circumstances it does not appear to be applicable to dividend distributions but can be held as a contingent reserve against possible losses on other capital adjustments.

Income from Royalties

When royalties are received as a result of the disposal of patent rights, lease of ore lands, etc., the auditor should examine the contract or agreement to determine the basis of the royalty charges. In many cases royalties are based upon sliding scales or upon output or some other contingency which should be verified.

Appreciation in Value of Assets

It has been suggested elsewhere in this book that appraisal companies are apt to certify to valuations in excess of book figures. It must be said in favor of these companies that they seem to carry on their appraisals in a careful and conscientious manner and it may be that the doubling in costs of materials and labor during the last ten years justifies their apparent overvaluations.

Effect on Costs.—Many business men who secure an appraisal which sets forth that their buildings and machinery are, on the basis of a replaceable valuation less depreciation, worth more than they cost originally, wish to set up on their books and statements this diagnosis, but do not like to be told that they are making trouble for themselves. They have a larger valuation to wipe out by means of depreciation reserves, and thus, in a sense, they are increasing their cost of production. After a credit to

current or earned surplus account is once made, it is most unlikely that any part thereof will be used except for dividends.

Where the book value is increased, with a corresponding credit to a special reserve account, and the periodical provision for depreciation is increased in proportion, the amount of the increase might be credited to surplus on the theory that this was an additional earning due to an increase in the asset value. In reality, there is no change in the final result because the special earning is offset by the increased cost. All that is gained is an increased cost figure based to a certain extent on the increased valuation due to the appraisal.

If it is contemplated that the current income account shall be charged with sufficient depletion or depreciation to replace the appreciated value of the asset, the periodical charge must be on the basis of the written-up value; this is proper procedure under federal income tax practice. Under ordinary accounting procedure, income is debited only with such amounts as will renew the original cost of the asset; surplus arising from revaluation of assets is debited with the difference between depletion or depreciation based on appreciated value and cost.

Valuations as of March 1, 1913.—It is entirely proper to set up actual values at such dates as March 1, 1913, for tax purposes; but such revaluations should be so clearly stated in books of account and balance sheets that no one will be deceived.

Paying Dividends.—The law on the subject of profits is not well settled, but it is quite likely that no legal obstacle can prevent a corporation from revaluing part of its assets and applying the excess so raised to surplus available for dividends. With the law in such an unsatisfactory condition it is the professional auditor's duty to educate the business public to the principle that it is not only foolhardy but unscientific to write up the value of an asset which is not for sale and which therefore cannot be represented by cash or its equivalent. Funds for dividends should be realized from earnings. The working capital

of a company is permanently depleted if a cash dividend is declared out of surplus created by writing up assets.

The foregoing applies to cases where assets are so exhibited that those who rely on published statements are deceived, and to cases where earned or free surplus accounts are increased with the possibility that improper or improvident dividends will be paid. There are cases where appreciation is permanent and obvious and where failure to disclose it will deceive. It may be that mining properties or other assets have so greatly increased in value that mortgage bonds in amounts greatly exceeding book values have been sold. It would obscure the true situation if the assets were not written up to actual value. Of course the excess above book value should be credited to "surplus arising from revaluation" and not to earned surplus.

Cost as Basis.—Capital assets should be carried at cost unless and until some change occurs which justifies a revaluation. In a going business, the ownership or control of which does not change, revaluations may be made at any time provided the changes between original costs and revaluations are clearly shown.

CHAPTER XVII

THE INCOME ACCOUNT—EXPENSES AND LOSSES

The several accounts which show the details of the charges against or deductions from the earnings of an enterprise are fully described in Chapter XXV, "The Detailed Audit—Purchases and Expenses." There are, however, certain accounts which do not arise out of cash transactions and others which need additional explanation. These accounts will now have our attention.

Reserves

We have discussed on other pages the following reserve accounts:

Doubtful accounts, page 90.
Accrued expenses, page 270.
Depreciation, exhaustion, etc., 185.
Obsolescence, page 186.
Contingencies, page 247.
Sinking fund accounts, page 201.

The question now arises how and when these charges should appear in a current income account. The fact is that in some cases they do not appear in the current income account at all.

Failure to Deduct Expenses.—A fair proportion of the business enterprises of this country which consult professional accountants heed the advice given and include among their expenses, or deductions from income, *all* of the costs of doing business. The words "net income" are not used by them except after full allowance is made for keeping the capital intact. Most of the remaining concerns and those who consult but do not heed the professional auditor, however, include among their income every dollar of possible income; but from such income is deducted

only such costs and expenses as are apparent and easily ascertained, the balance being wrongly designated as "net income." This balance is carried to surplus and is thereafter referred to as the net income earned during the period stated. Subsequently (but only if the period has been a prosperous one) various deductions are made from surplus, covering depreciation, adjustment of inventories, writing off of accounts receivable, etc.

Such practice seems hopeless to the auditor who is familiar with actual conditions, who knows that about 99 per cent of such deductions were direct charges against income and that most of the items should be included in the current income statements. But business men will fool themselves, and corporation officers and directors will fool their stockholders and attempt to fool the public. However, a slight but perceptible progress is being made, and it is inevitable that some day the words "net income" will have the same meaning as the word "sterling" on silver. Laws and custom will make the issuing of false statements such as are now spread broadcast a punishable offense.

Financial Writers Responsible.—In this respect it is regrettable that many financial writers of ability who should, and perhaps do, know better, are responsible for much of the present unsatisfactory state of affairs. Just as surely as a corporation does issue a carefully prepared balance sheet and an income statement, probably certified to by reputable auditors, in which proper deductions are made to cover the items heretofore referred to, just so surely one or more of these writers wrongly analyzes its contents for the edification of the investing public. They ignore the deductions for depreciation, etc., and solemnly state that during the period the corporation "earned" a given per cent on the capital—carrying out the rate to several decimal places. They may mention incidentally that *from the income* there are certain deductions, thus emphasizing their own opinion that the actual profit is the one used as a basis for calculating the rate earned, and that the deductions are purely voluntary.

INVESTIGATORS.—When legislative investigations are instituted, these figures are also used. The fallacy has been carried so far that some corporations that have not and never can earn a dividend on their common stocks are cited as having realized large earnings. In the case of the United States Steel Corporation nearly all of the financial writers, and certainly all of the statesmen (?), who have investigated its affairs, state its net earnings over a period of years as being many millions of dollars greater than the corporation's accounts themselves show.

THE TROUBLE EXPLAINED.—What is the real trouble? Surely accurate accounts are desired. Is it because the tendency to overstate profits and understate losses is so general among business men that no standard exists?

Perhaps public accountants are themselves somewhat to blame for present conditions. Have they always been keen to make from gross income all the deductions of which they have had any knowledge, before designating any one sum as "net income"?

The fact is that because some of the reserves for depreciation, etc., are more or less difficult to ascertain, it has been a fairly general custom to omit them entirely, or else to qualify the account by stating that the net income is so and so exclusive of some very large costs and expenses. Is it not peculiar that this action on the part of the auditor exactly fits in with the wishes of the client who knowingly overstates his profits? Candidly, is it not possible to estimate more closely an allowance for depreciation than it is to estimate the valuations of fixed assets or current inventories to which the auditor so cheerfully certifies?

Depreciation

The question of depreciation is important enough to require an entire chapter for its discussion (see Chapter XXVIII), but at this point it is in order to consider whether or not depreciation should be included among the cost and expense items in the current income account.

In the preceding section attention was called to the general practice of omitting this and other items from ordinary operating accounts. Accountants of experience defend this practice on the ground that when depreciation has not been calculated at all, or when an arbitrary amount has been set aside, the task of determining a fair allowance—one that can be included among operating costs without detracting from the value of the entire statement—is too onerous to perform, with the result that costs are compiled without any allowance for depreciation. It is, of course, assumed that mention is made of the omission before any final figures are certified to.

Proper Treatment of Depreciation.—It will always be admitted that wear and tear, and perhaps obsolescence, are going on all the time. If not admitted in so many words, the repairs and maintenance accounts speak for themselves. The usual and time-worn argument against provision for deterioration is that constant attention is given to the up-keep of the plant and that renewals and repairs are looked after as soon as, or before, occasion demands.

Disregarding for the moment the fact that there is always a considerable amount of *accrued* wear and tear not sufficiently apparent to necessitate immediate attention, we may consider the question whether the renewals and repairs which are imperative are always included among the expenses or costs, and recur regularly enough to be charged up as incurred without upsetting the equilibrium of the accounts, or whether these expenditures ordinarily fluctuate so greatly that factory managers are justified in leaving them out of consideration in self-defense, since when included their costs vary to such an extent that comparative records are ludicrous.

Now in the case of fuel no such difficulty arises. Purchases and consumption run along regularly and no one thinks of omitting its cost. Wherein lies the essential difference between the cost of fuel consumed under a boiler and the accruing loss on the

purchase price of the boiler itself? Both are consumed in the process of manufacturing. The cost of both must be reimbursed from the proceeds of the sale of the product manufactured, or the capital of the concern is depleted. Capital depletion is exactly what happens in thousands of cases. The cost of fuel is made a part of the cost of the product, but for some mysterious reason the cost of the boilers is provided in some other way. At least that is the effect of the accounting system followed.

Operations of First Year.—The most flagrant fallacy is advocated in connection with the accounts of the first year's operations of a new plant. The management, if sane, knows that the buildings and machinery will not last forever and that into every unit of production there has entered some part of the entire cost of the plant. It would be ridiculous to charge the total cost of buildings and machinery to the operations of the first year, but is it not equally unsound to make no charge whatever to operations merely because the exact amount of the charge is somewhat difficult to ascertain?

Situation Restated.—Accounting difficulties are comparative only, and accurate accounts always require careful and intelligent attention. If the same thought were given to calculating what proportion of the cost of a boiler enters into the cost of operation, as is given to determining the basic costs of other elements which enter into the manufacturing operations of a modern plant, the amount arrived at would be accurate enough to form a dependable item of prime cost.

Professional auditors fail in their duty whenever they allow to pass an opportunity to elucidate the foregoing principle. Thousands of enterprises have gone into bankruptcy solely because their accounts never exhibited the full cost of their product. As soon as accounting practice and procedure and commercial common sense are developed to the point where an allowance for depreciation is made just as much a part of prime cost as labor or materials, a considerable number of business failures will be averted.

Obsolescence

The author is not prepared at this time to support the contention that an allowance for obsolescence is an item of prime cost, as is one for depreciation. The latter is certain and cannot be avoided any more than taxes or death.

We are never certain of the future effect of obsolescence. It is true that most of our modern machinery has superseded other machinery which was not worn out, and that a plant built ten years ago, which counted on a twenty-year life for its equipment and set up a depreciation reserve on that basis, has not been able to renew that machinery out of the reserve.

Take the case of a machine costing $1,000 in 1908, having an estimated life of fifteen years, and a scrap value of $100. There is $900 to charge to operations and a depreciation reserve based on the expected life would be conservative accounting. In 1915 it is found that the machine is obsolete and a new one costing $1,500 is purchased, but the new one has twice the capacity of the old. Here to a large extent we find our answer. An old machine should not be superseded by a new one unless the latter has greater efficiency or capacity. This supplies authority for capitalizing part of the cost of the new machine unless the new machine costs no more than the one superseded.

It is obvious that obsolescence cannot be foreseen, and therefore any attempt to reduce the contingency to a definite allowance to form part of current operating costs defeats its own purpose. In view of the rapid strides in all of the mechanical sciences, obsolescence is likely to continue to be a serious factor in the ultimate cost of producing manufactured goods. Therefore, whenever possible, a reserve should be created to meet the possibility, but the reserve should be provided for out of income before stating the surplus applicable to dividends, never as an item of prime cost.

The foregoing references are to specific reserves for obsolescence; it is not intended to discourage liberal allowances for depreciation which in effect include what may be termed ordinary

obsolescence. It is almost impossible to differentiate between ordinary and extraordinary depreciation; but in practice there is a distinction. When a depreciation rate of 10 per cent on machinery is fixed, it is usually assumed that the possible effective life is more than ten years, although as a general average the effective life of machinery is not more. The element of obsolescence operates to reduce the average life. This may be termed "ordinary obsolescence." There is no objection to separating the 10 per cent rate into the parts applicable to depreciation and to obsolescence; but good accounting practice does not require segregation.

Allowances for extraordinary obsolescence are in the nature of contingency reserves, because they anticipate the unknown. It is not proper to make charges against income for reserves unless the ultimate disposition of the reserves is reasonably certain.

Accrued Expenses, etc.

It is perhaps superfluous to say that the items of expenses in an income account embrace those which have accrued during the period, whether paid for or not. At the closing date all accrued expenses, rents, taxes, interest, and similar items should be ascertained and entered as liabilities on one side and charged to their respective expense accounts on the other.

Since many of these expenses are more or less unusual in their nature, it seems that some are unavoidably omitted. The question then arises in subsequent audits, whether or not the items applying to prior periods should be charged to surplus or be included among the current expenses of the period in which paid. There are two reasons in favor of the latter practice but no good reason in favor of the former. In the first place, when charges are made against an old book surplus it simply means that so far as published accounts go they are never in evidence. That is, the items are not known at the time and are therefore omitted from the accounts in the period to which they belonged, and, being eliminated from the period in which paid, they practically disappear.

The most valuable records compiled are comparative

schedules of earnings and expenses, and when these are carried along from year to year it is practically impossible to adjust reports which are perhaps a year old and of which frequent use has been made. Therefore, proper accounting practice permits the inclusion of such items in the current income account, without calling special attention to the matter, unless the items are large enough to alter materially the results, in which case the items are deducted from the net income of the current year before a transfer to surplus is made. If the items are comparatively small it may be assumed that corresponding items are omitted from the current accounts. These will have to be taken care of in the subsequent period.

This must not be construed as an excuse for closing accounts before every known liability is taken into consideration. The auditor who does not satisfy himself that all known liabilities and those which should be known are included in a balance sheet, is guilty of negligence and deserves any ill consequence which may ensue.

Trade Discounts

The author, in common with most practitioners, has always stated that trade discounts are direct deductions from invoices and so should not appear in the books of account of the seller or of the purchaser.

It is true, however, that in some trades considerable emphasis is placed upon the variations in trade discounts; therefore the student of accounts should be given an opportunity to decide for himself whether trade discounts have any place in books of account. This point assumes importance in auditing, because the auditor cannot very well report the amount of trade discounts given or received unless the items have been kept separate throughout the accounting period.

Trade versus Cash Discounts.—When the rate of discount for prepayment is 2 per cent flat or less, it is proper to consider

it a true cash discount. When the rate of discount is more than 2 per cent, it is not logical to look upon it as a premium for prepayment.[1] Many so-called cash discounts are 7 per cent flat. When such a rate is used it is not logical to deal with it in any other way than as a deduction from sales. The concern making such sales should deduct the discounts (in an aggregate sum if more convenient) from the outstanding accounts and the purchasers should deduct the discounts from their cost prices and from their inventories. The rule is a somewhat rough and ready one but it is accurate enough. It is not inflexible but should be followed unless a better general rule can be devised. In defining "cost" and "net sales" there must be some uniformity even though precise formulae are not always possible.

Cash Discounts

Where it is customary to permit trade debtors to deduct a discount for cash within a limited period, these deductions are entered in a special column of the cash book. The discount allowed up to the date of the closing will, of course, appear in the books, preferably in a separate ledger account. The auditor should ascertain whether discounts are taken by some customers in spite of the fact that their payments are made long after the discount period has expired.

The aggregate of cash discounts should be entered among the expenses of the business and not as a direct deduction from gross earnings. The theory is that the discount allowed is a premium given to secure prompt payment as well as for the use of the money at an earlier date than it would be received if no inducement were offered. If these allowances are strictly cash discounts, and are granted only if the debtor pays within the time specified, they are clearly an expense and should not be charged

[1] The arbitrary selection by the author of 2 per cent is based on an estimate of its approximate accuracy; in any event it affords a reasonable basis for a general rule and has the merit of being definite. When conditions permit the computation of some other rate as the dividing line, the more accurate rate should be used.

against sales as if in the nature of an abatement of the purchase price of the goods.

DISPOSITION OF NET INCOME

When an auditor has determined the amount which he is willing to certify represents "net income," the difficult part of his task is completed. Probably he will not be asked whether the amount shown should be paid out in dividends or transferred to surplus, and as a matter of principle he is not concerned. However, his opinion may be asked, and if so, he may be able to suggest that disposition of the net income which is for the best interests of the concern.

Dividends

Whether to declare a cash or a stock dividend is a question which may very properly be referred to the auditor. There should be no transfer of net income to general surplus account unless the entire amount is applicable to dividends when and if declared. The net income for the period is first shown, then any transfers which have been authorized by the board of directors are deducted, the balance being carried to surplus. This practice of carrying the balance of income to surplus has been followed for a number of years by some of our best-managed corporations, and has the sanction of law, because the courts have repeatedly held that the directors of a corporation need not declare dividends unless they so desire, provided they can show that the funds which would be required for dividend disbursements can be used to better advantage in the business.

When, however, the directors invest the surplus in securities the control of which is not a necessary incident to the carrying on of the business for which the corporation was organized, they carry this practice to an extreme which stockholders never contemplate when they purchase stock.

The Law in England.—Table A of the English Companies (Consolidated) Act, 1908, provides in section 99 as follows:

The directors may, before recommending any dividend, set aside out of the profits of the company such sums as they think proper as a reserve or reserves which shall, at the discretion of the directors, be applicable for meeting contingencies, or for equalizing dividends, or for any other purpose to which the profits of the company may be properly applied, and, pending such application, may, at the like discretion, either be employed in the business of the company or be invested in such investments (other than shares of the company) as the directors may from time to time think fit.

This provision is not necessarily binding on all English companies, since the latter may incorporate in their articles of association an article evincing a contrary intent. But where articles of association are not registered or where there is no contrary intent on such articles as may be registered, the above provision will be binding on the directors of the company.

Position to Be Taken by Auditor

An auditor should recommend the setting aside of reserves for contingencies or for the equalization of dividends or for other reasonable purposes, so long as the financial condition of a corporation demands conservative financing; but when it finds itself so well off that it can pay all of its debts and have remaining cash enough to purchase investment securities, the auditor should allow the board of directors to take all responsibility for such action. To do otherwise savors of paternalism. Stockholders forget dividends quickly, and it is therefore not thought safe to pay out big dividends in good years, and small or no dividends in poor years. But some stockholders are as well qualified to invest their earnings as are the directors. They may prefer some variation in the dividend rate to an attempt to build up a big surplus, thus indefinitely postponing the distribution of the earnings of a particularly prosperous period.

CHAPTER XVIII

CONSOLIDATED BALANCE SHEETS AND INCOME ACCOUNTS

The discussion in this chapter will be limited to matters which arise in the audit of accounts which should be consolidated in order to exhibit true financial conditions.

The audit of the accounts of holding companies presents very few problems which are not found in the audit of all corporate accounts. The verification of the assets and liabilities and of earnings and expenses follows the same line as has been fully discussed elsewhere in this book. In the method of presentation and publication of results, however, the auditor finds questions of great importance. Formerly many balance sheets and income accounts of holding companies were conspicuous for the information which they did not disclose; in some cases there was deliberate intent to deceive; in other cases it was assumed that the best interests of the stockholders would be served by concealment of the facts. Opportunities for diversion of assets and for manipulation of income or expenses by means of misleading statements are so many that unusual care must be taken to disclose all of the facts.

An auditor is no more justified in certifying to the accounts of a holding company when he has omitted to audit the accounts of a subsidiary, than he is in certifying to the accounts of another corporation wherein he has omitted to verify the accounts of its branches. As has been said:[1]

> The accounts of a corporation should be prepared so that the auditor can certify that the balance sheet represents the true financial position of

[1] Geo. R. Webster, "Consolidated Accounts," *Journal of Accountancy*, Volume 28, page 258.

the company, and that the profit and loss account is a fair statement of the result of the company's operations. It has long been recognized by accountants that in the case of corporations with subsidiary companies these two conditions can only be shown by the preparation of consolidated accounts. If bankers had insisted on the preparation of such accounts they would probably have avoided several unpleasant experiences. . . .

For a time many lawyers were opposed to the presentation of consolidated accounts by companies to their stockholders, but the leading lawyers engaged in corporation practice have long since recognized that the technical legal situation is less important to stockholders and the public than the substantial position and have accordingly accepted the principle of consolidated accounts. . . .

It may therefore be fairly said that the principle of consolidation has attained general acceptance.

The existence of separate legal entities seems to sustain a belief on the part of some corporate officers that a different degree of accountability exists than is the case when there is only one legal entity. When a corporation owns and operates branches, no one thinks of publishing the head office accounts and omitting the branch accounts; or of including the accounts of certain profitable or unprofitable branches and omitting others. Such accounts are not even referred to as being consolidated; it is taken for granted that all are inseparable parts of a whole. But formerly, in many cases, there was no attempt to consolidate certain of the accounts and in some cases there was no consolidation at all. When there is control, there is accountability; when there is accountability, there should be complete disclosure to owners. The published accounts of holding companies or of affiliated groups should be stated as nearly as possible in the same way as head office and branch accounts. There are certain legal and accounting difficulties to be overcome when there is not complete ownership; but on the whole the difficulties are not insuperable, and in cases where the most complications exist, all such problems have been solved. The accounting and constructive requirements of consolidated balance sheets and income accounts are discussed and fully explained in any good

book dealing with accounting procedure.[2] The auditor is concerned chiefly with the form of publication. Elimination of intercompany transactions automatically permits the consolidation of all of the accounts. In no other way can the facts be presented.

Definition of "Subsidiary"

The word "subsidiary" in accounting practice means a corporation the majority stock of which is owned by another corporation. The term does not include corporations which are merely controlled through substantial minority holdings or by means of operating contracts.

In many cases the accounts of partially owned subsidiaries are not consolidated with those of the holding company. Ownership of 51 per cent of the stock of a subsidiary may insure permanent legal and operating control; but the relations between the holding company and the subsidiary may be such as to render it unnecessary or objectionable to consolidate the accounts.

The Anaconda Copper Company adopted the policy in 1920 of consolidating the accounts of all subsidiaries which were 75 per cent or more owned. So far as any uniformity at all exists this represents present practice. Agreements regarding note issues usually define subsidiary companies as those which are 75 per cent or more owned.

BALANCE SHEETS OF HOLDING COMPANIES

The balance sheet of a holding company is wholly devoid of the information an investor or stockholder seeks unless the details of the assets and liabilities of the subsidiary corporations are set up in the form of a consolidated balance sheet.

---

[2] Anyone interested in this phase of the subject is referred to the paper by William M. Lybrand, C.P.A., which appears in the Year Book of the American Association of Public Accountants for 1908, page 255; also to a paper by Walter A. Staub, C.P.A., in Columbia Income Tax Lectures, 1921, page 188, entitled "Consolidated Returns."

In a holding company balance sheet which is not consolidated there appears on one side a huge sum opposite the caption, "securities of subsidiary companies." Then there will probably be another item representing advances (usually also large) to subsidiaries; there may be a little cash, but other assets are scarce. The chief criticism leveled against such a balance sheet is that the absence of data relative to the quick assets and liabilities of the subsidiaries makes it impossible to form an opinion as to whether the concern as a whole is properly financed or whether there is absolute need of additional working capital to prevent bankruptcy.

The balance sheets of some holding companies show among the assets the *net* assets of the subsidiaries. That is, from the accounts receivable and inventories are deducted the accounts payable, the resulting balance being shown as an asset. This is obviously wrong. The trade debts may be out of proportion to the assets and may be overdue and pressing.

Strong pressure is sometimes brought to bear on an auditor to induce him to prepare the balance sheet of a holding company so that it will indicate a stronger financial position than actually exists. The best answer to such a request is a positive declaration on the part of the auditor that proper accounting procedure requires a certain form of balance sheet and that there will be no deviation therefrom.

The elimination of intercompany accounts practically clears the balance sheet of all items which do not appear in the ordinary balance sheet except when there are minority interests. In the case of funded debt, the consolidated balance sheet shows the funded debt of the holding company and of the subsidiaries in the hands of the public set forth in the usual way. Likewise the capital stocks of the holding company and the subsidiaries in the hands of the public are separately stated. In stating the surplus accounts the parts applicable to the holding company and to the subsidiaries are shown. A further separation is usually required to show surplus at date of acquisition (which is capital

surplus so far as the holding company is concerned) and surplus earned after date of acquisition. When there are preferred stock issues, the minority interests in the surplus are computed on the basis of preferred stock at par, unless the preferred stocks are entitled to a share in the profits; in such cases an adjustment must be made.

The stock in the hands of the public and the share of surplus applicable thereto, including the share of earned surplus, may be shown together. As stated, the share of surplus accruing to the holding company is treated as a capital item; its share of subsequent surplus is merged with its earned surplus.

Importance of Correct Statement—Rediscounts

The importance of the correct statement of the financial position of parent and subsidiary companies for purposes of determining the eligibility of commercial paper and its desirability for rediscount, is set forth in the following quotations from a letter to the author written by J. H. Case, deputy governor of the Federal Reserve Bank of New York:

> We have always felt that where a corporation owns all or enough of the capital stock of another corporation so that the latter corporation might be considered either a controlled, a subsidiary, or a proprietary concern, the balance sheet submitted should be the consolidated statement of the parent and the subsidiary corporation in order that we might have full information in passing upon the eligibility as well as desirability of the paper for rediscount by this bank.
>
> In addition to the consolidated balance sheet last mentioned, we believe that there should also be furnished in instances of this kind, separate, individual statements giving the assets and liabilities of the parent company and each of the controlled, subsidiary, or proprietary concerns, as it sometimes happens that the borrowing is done not by the parent or principal concern but by the subsidiary. Moreover, notes of a purely holding company as a general rule are not eligible, although the paper of an operating subsidiary might be, provided its statement showed a reasonable excess of quick assets over current liabilities.
>
> With regard to affiliated companies as distinguished from subsidiaries, which may not be owned or actually controlled by another corporation but

affiliated through common ownership or otherwise, we do not feel that a consolidated balance sheet discloses the required information, but that each of the affiliated corporations should make separate financial statements.

Unless complete, detailed statements as indicated herein were available, it would be difficult to determine whether or not notes of this character would be eligible for rediscount by us, under the regulations of the Federal Reserve Board.

Consolidation of Affiliated Interests.—One of the major reasons for the growing practice of requiring consolidated accounts is the danger of suppression of unfavorable affiliations. When one corporation owns all or nearly all of the stock of one or more other corporations, good accounting practice requires consolidation; when an individual owns all or nearly all of the stock of more than one corporation, and there is no corporate ownership, the practice is not settled. The auditor should be guided by the relations between the three or more parties in interest. When an individual owns the stocks of two corporations and the inter-relations are such that separate accounts may mislead those who are entitled to information, the auditor should insist on consolidating all of the jointly owned properties, including the accounts of the individual. In the foregoing comments of Mr. Case, the thought is expressed that in such cases consolidated accounts alone do not tell the whole story, and separate statements are necessary. It is obvious, however, that separate statements may not exhibit the status of the affiliated interests as a unit; in such cases consolidated statements supported by separate statements should be prepared.

Form of Balance Sheet

In a consolidated balance sheet all intercompany accounts are eliminated, thus exhibiting the debts due from the public and to the public. Any other form of balance sheet which includes as assets accounts due by one company to another, and as liabilities accounts due from one company to another, is misleading

and useless for the purpose of disclosing what will be realized from the quick assets and the amounts which will have to be paid.

Bonds of Subsidiary.—Some question may arise as to the treatment of bonds of a subsidiary not guaranteed by the holding company. If the assets of the subsidiary are sufficient to cover this liability the point is an academic one, but instances may be found in which the bonds of a subsidiary are not fully secured. The consolidation of the balance sheet of one with the other would thrust upon the holding company a liability not directly assumed, and if the auditor were sure that no contingent liability existed in respect thereof, he might sanction the omission of both the assets and liabilities of the subsidiary. As mentioned hereafter, however, it will usually be found that the holding company will assume such a liability for the sake of continuing the business, in which case the full amount of the bonds must be carried as a liability.

Capital Stock of Subsidiary.—It is obvious that the capital stock (all or partly owned by the holding company) of a subsidiary which shows a deficit is of no value unless the depreciation in the value of the assets is abnormal, and unless there is a reasonable assurance that the deficit will be more than made good out of future earnings.

Should All Items of Assets and Liabilities Be Segregated to Show Minority Interests Therein?—Under good accounting practice the segregation of surplus into that which inures to the holding company and minority stockholders respectively is sufficient recognition of the minority interest.

Some corporations have apportioned to minority interests their respective shares in each item of asset and liability but the practice is rare and has little to commend it.

Agreements and deeds of trust under which corporations borrow money sometimes contain provisions which require the segregation of assets in the same ratio as the majority bears to the

minority interest. These agreements are made with the specific purpose in view of conserving the net current assets of the borrowing company, and precautions are taken to avoid any shifting of assets or liabilities to the detriment of the lenders. It is, of course, necessary to comply with the terms of the agreements and prepare suitable balance sheets; heretofore it has been assumed that such special balance sheets are not of interest to anyone except the trustee named in the agreement, i.e., under ordinary circumstances the balance sheets need not be submitted to others than those who are specifically entitled to them; but if the balance sheets disclose violations of the agreements, penalty clauses operate and the enforcement thereof may produce far-reaching results. It rests with the trustee named in the trust deed to proceed or not. This contingency raises the question that creditors other than those who are parties to the agreement may be entitled to know that the other creditors have it within their power to demand immediate payment of long-term notes or ask for a receivership or take other action which might prejudice the equity of general creditors. Under the rule that all material facts regarding financial conditions must be disclosed on the face of a balance sheet, the author is of the opinion that whenever agreements of the nature of those described are in existence, reference to the agreements should be noted on the face of the balance sheet so that any creditor who desires full information may secure a copy of the agreement and inform himself regarding the possibilities of default.

When Ownership of Minority Interest May Be Included Among Current Assets of Holding Company.—When a holding company purchases a minority interest in another corporation, the actual investment in the stock is the only item which appears in the books of the holding company and in its balance sheet. In the latter the item appears among marketable investments or is stated separately, depending upon intention and availability. If there is a free market for the stock and the in-

tention is to hold it for temporary investment, the item properly appears as a current asset.

When Minority Holdings Are Not Current Assets.—If there is a free market for the stock, but if at time of acquisition and subsequently the intention is to hold it indefinitely because of business relations or other commitments, it would not be proper to include the stock in the current assets.

When Majority Interests Are Acquired.—When one company acquires a majority interest in the stock of another corporation, good accounting practice requires a disclosure of details which is not called for in the case of minority holdings. There is no necessary relation between the procedure required under tax laws which involves technical and arbitrary definitions of "invested capital,"[3] and accounting procedure which is designed to record and exhibit financial facts irrespective of their relation to tax liability; therefore the books of account and published statements should reflect good accounting methods.

Records in Books of Account

When a majority interest in the stock of another corporation is acquired, the purchase price represents the cost of the investment the same as when a minority interest is acquired. The *value* may fluctuate subsequently; but it is not good accounting practice to reflect mere fluctuations. In the course of time, revaluations may be deemed to be necessary in order to represent what are believed to be permanent changes in value—up or down. Some corporations do not change the book valuations of investments in the stocks of other corporations; on the whole the undoubted advantage of not marking up values to include appreciation and marking down values to represent depreciation is frequently offset by the disadvantage to stockholders who are kept in ignorance of permanent favorable changes in assets. In

[3] For discussion of consolidated returns and other technical requirements under tax laws, see *Excess Profits Tax Procedure*, 1921, pages 282 to 330.

more than one case minority stockholders have been deceived and have sold out in ignorance of the facts. In other cases old stockholders have sold out and new stockholders have bought in at greatly inflated prices due to unfounded rumors regarding values alleged to have been omitted from balance sheets. It is a perplexing question. Conservative accounting methods have saved thousands of concerns from failure. It is not wise to depart from conservative methods; but if such methods can be retained and more information be furnished so that those entitled to the facts will not be deceived, a forward step in accounting methods will have been made.

Cost Is Sole Criterion Until Conditions Change.—There has been much discussion regarding the possibility of property having an actual value *at the time of purchase* in excess of its purchase price. In computing invested capital, taxpayers are subject to many arbitrary, technical, and in many cases inequitable restrictions; offsetting these the revenue laws permit in certain cases the inclusion of original investment, even though it may have been greatly reduced by losses, excess values are included as "paid-in surplus," and many adjustments of book values, such as restoration of assets charged off, are permitted. In short, computations for invested capital purposes under tax law bear no necessary relation to good accounting practice.

From a common-sense point of view, property is worth what it costs, unless the usual elements of bargain and sale are absent. When there are willing buyers and willing sellers, cost and value at time of acquirement are synonymous. The buyer may claim to have reaped the benefit of acquiring something which is worth more than it cost but upon inquiry the seller may claim that he received full value. The only test is for the buyer to resell or offer to resell *at once;* unless this is done, the estimate of simultaneous appreciation is not supported by competent evidence.

Auction sales furnish interesting comparisons. Land and personal property are sold and resold soon thereafter, often at

prices higher than cost. We do not often hear of those who sell, or would like to sell, at less than cost a few minutes after their bids have been accepted. As a rule, resales at large advances usually occur after it is known that the auction sale as a whole is a success. Buyers who wait and pay more than if they had participated in the original bidding are in effect buying in a different market; they have waited and they ascertain (or think they ascertain) that conditions have improved. They hope to resell to someone else, who in turn thinks that another even more favorable change has occurred. This goes on for a long or short period, depending on the atmosphere and the degree of frenzy which has been reached.

Generally speaking, the feeling that property is worth more than it costs proceeds from an instinctive optimism following a purchase. No one cares to acknowledge a mistake before it is necessary. The feeling after a sale is just the opposite. The greatest "bear" is the sold out "bull." No one cares to acknowledge that he sold too soon or for less than his property was worth.

To repeat—when a willing buyer and a willing seller close a transaction, the former should not simultaneously claim and set up on his books a value in excess of cost, and credit the excess to surplus.

Procedure When Cost of Holdings in Subsidaries Is More or Less Than the Book Value of the Shares Purchased.—The principle of the danger of immediate revaluation applies to the purchase of a majority interest in the stock of a corporation. Assume the book value of assets to be $250,000, liabilities to be $50,000, capital stock $100,000, and surplus $100,000. A corporation purchases from the owners 80 per cent of the stock for $100,000. In the books of the holding company the stock should be carried at cost ($100,000), although 80 per cent of the net worth of the subsidiary is $160,000. Without independent evidence the book value of the net worth may not appear to be overstated. But there is independent evidence;

the owners who have full knowledge of all facts willingly sell for $100,000. Therefore, an appraisal at that time of more than $100,000 ignores the opinion regarding value of one who got all he could for it.

In the foregoing case a consolidated balance sheet after eliminating intercompany items would show net tangible assets of $60,000 in excess of credits to offset. If there is a good-will account it can be reduced $60,000; if there is no good-will account, the proper reflection of the actual purchase price would seem to be to reduce the book value of the subsidiary company's fixed assets. This is arbitrary and rests on the assumption that the current assets are properly valued and that fixed assets, being difficult to realize on, were in fact sold at less than book value.

It cannot be said, however, that good accounting practice requires that the book values of tangible property be written down when holding companies pay less than book value for shares purchased. There is ample authority for crediting capital surplus in the consolidated balance sheets with the excess of book value above cost, except when the good-will is carried at a sufficient amount to absorb the excess.

It seems unnecessary to many accountants to reduce the book value of the subsidiary's assets when there is no apparent overvaluation. On the other hand, it seems improper to add to surplus account, even though the surplus arising from consolidation is segregated from earned surplus.

The payment of more than book value means that book values are understated and should be adjusted, or (as is usually the case) there has been a payment for good-will; in such cases the consolidated balance sheet should show the facts. It is not proper nor necessary to deduct the excess from surplus.

The foregoing does not prevent subsequent reflection of appreciation which occurs after the date of the purchase, and when permanent appreciation is obvious. The auditor may find it necessary to insist on a readjustment in cases where a consolidated balance sheet fails to reflect the reasonable value of assets

owned by a subsidiary. It may be that a bargain purchase was made and that neglect to adjust book values would offer opportunities for manipulation. Cases are known where the knowledge of valuable assets owned by subsidiaries has improperly been withheld from minority stockholders. It may be that a memorandum on the balance sheet is better than a readjustment of the accounts.

Guarantees of Subsidiaries' Obligations

It has been pointed out elsewhere that good accounting practice now requires full disclosure of indorsements, guarantees, and substantial commitments running beyond the date of the balance sheet. In some cases holding companies guarantee the payment of contracts entered into by subsidiaries, such as those for merchandise to be delivered at future dates. The important point is full disclosure of material facts. It makes little difference how the contingent liability is reflected so long as it appears. Usually a statement or footnote on the consolidated balance sheet giving all relevant facts is sufficient notice to all who may be interested.

INCOME ACCOUNT

A consolidated income account should supplement the consolidated balance sheet.

Gross Income.—Certain holding companies continue to show as gross earnings only such dividends as have been received during the period from the subsidiary companies. Such practice merits the strongest censure. The author has heard it contended that, inasmuch as the only legal method which a corporation has of distributing profits is by means of dividends, it is most improper for a holding company to take credit for part or all of the earnings of a subsidiary company which had not been so distributed. This sounds well in theory, but in practice it is the argument of dishonest men. Almost invariably the sole reason for taking

advantage of this technicality is that one or more of the subsidiaries have incurred a net loss in excess of the aggregate profits of all of the companies, and the management of the holding company, wishing to conceal such loss, seeks by subterfuge to justify the action.

An auditor cannot be too positive on this point. Wherever a holding company owns and controls one or more subsidiaries, the profits or losses of the subsidiaries must be stated for the same period as that of the holding company and consolidated. Any other method may lead to gross abuse.

Dividends Paid by Subsidiaries to Holding Company.—Holding companies frequently purchase the stocks of subsidiaries and pay considerable premiums above par. In nearly all such cases the subsidiaries have large surplus accounts. The payment of dividends out of such surplus is not income to the holding company, because the dividends merely offset in whole or in part the premiums paid for the stock. For this reason alone, surplus at date of acquisition and subsequently earned surplus should be segregated. All dividends out of "prior" surplus, when received, should be credited to the holding company's investment account.

False Statements.—The directors of a holding company, the sole income of which was the dividends of subsidiaries, could withhold dividends from prosperous companies while they were accumulating the stock of the holding company, and would be lavish with such dividends whenever they desired to sell their holding company stock. This is not mere supposition on the part of the author. Holding company income accounts are made up in the manner indicated, and inexperienced professional auditors are sometimes induced to certify to their accuracy, being misled by the apparent legality of the procedure.

Since experienced and reputable auditors invariably decline to permit their names to be connected with a form of statement which is dishonest in fact if not in theory, this caution as to the income account of holding companies should be taken advantage

of by an auditor who may have the matter presented to him for the first time.

TWO ILLUSTRATIONS.—Ernest Reckitt, C.P.A., relates the following incident:

> I have in mind a case where I was called in to make, as I supposed, an audit of the books not only of the "Holding Company," but also of the subsidiary companies, and was amazed to find that it was proposed to have me audit only the "Holding Company's" books. Upon explaining that I could give no certificate on such audit, the most specious arguments were advanced and the president of the company attempted to use the full force of his strong personality to persuade me to defer to his wishes, which naturally only made me suspect still more the motives which actuated him. Finally, and with great reluctance, they handed me the books of the subsidiary companies, and I found out that two of the companies had made losses aggregating over $200,000 no part of which losses had been taken care of on the books of the "Holding Company," though they had been careful to bring on to the books of the "Holding Company" the profits made by other subsidiary companies. One year later, the "Holding Company" and most of the subsidiary companies were in bankruptcy, as they deserved to be.

The author was called upon several years ago to audit the accounts of a holding company in a large southern city, and of all of its subsidiaries. The latter included enterprises of different kinds but since the holding company owned practically all of the stock of each underlying company, it was necessary to consolidate the operations of the entire group in order to show its exact net earnings. Unfortunately, several of the concerns were not profitable, and the consolidated income account was not a document to be proud of.

One of the subsidiaries, however, was quite prosperous, and its net earnings in themselves were sufficient to pay interest and dividends on the holding company's bonded debt and capital stock, but the losses of the other companies seriously depleted the funds of the holding company and rendered dividends impossible.

A short time afterwards, the president of the company

appeared in New York with a large block of the holding company's bonds for sale. He submitted to the bankers, not the auditor's report, but a statement showing the earnings of the profitable subsidiary and ignoring so far as possible the existence of the other companies, and the bonds sold readily.

Should Entire Losses of Subsidiaries Be Absorbed by Holding Company?—The foregoing discussion has been based on a division of profits and losses on a mathematical computation.

If a profit is shown, the amount to be included as the share of the holding company is the proportion the stock, owned by the holding company, bears to the total capital outstanding. It must be assumed that the minority stockholders will eventually receive through dividends their share of the profits.

If a loss is shown, and if losses form the chronic condition of the subsidiary, it may as well be recognized that the holding company must assume all of them. This, of course, applies only to those cases in which a subsidiary company is so largely owned by the holding company that the minority interest cannot be depended upon to advance its share of the funds necessary to take care of the loss.

The holding company may carry these advances as an asset, but the auditor should place such a value upon these items as the facts warrant, and it is reasonably certain that the final result will be to include all of the loss in the consolidated income account, although something less than 100 per cent of the stock of the subsidiary is owned.

Comparative Statements

When the accounts of several subsidiaries, operating along substantially the same lines, are examined, one very important object is to endeavor so to state the accounts that the results are reduced to a uniform basis. Many adjustments may be necessary to take care of local conditions, etc., but no form of presentation is clearer or more valuable.

When comparative costs are feasible, it is important to ascertain the amount of the plant investment, since it may be that the costs as reported do not include depreciation or interest. The latter is usually omitted from costs on the ground that it is a profit on capital employed and therefore cannot be an element of cost. Admitting this, "without prejudice," it may nevertheless serve to conceal lack of ability on the part of the manager of one factory as compared with that of another. One may keep twice as much capital tied up in raw materials and goods in process as the other, and if units of costs are stated in fractions of a cent, the interest on the excessive capital employed may be sufficient to prove the superiority of one manager over another.

CHAPTER XIX

CERTIFICATES AND REPORTS

What shall it benefit an auditor if he perform the highest grade of professional work and be unable to present his results in a form acceptable to, and understandable, by his client? Yet this happens every day, chiefly because some auditors apparently prepare reports for themselves rather than for those they are supposed to enlighten. An engineer builds a bridge for others to use. It is useless unless it is safe and convenient. The man who rides across it does not care how many difficult problems were encountered in building it, nor how they were solved; he is content to judge the engineer by results. So with a banker or a business man. He employs an auditor because he wants results, and he wants results which he can use without having to follow in the auditor's footsteps and traverse the same jungles of figures and grapple with the same problems through which the results were accomplished.

As pointed out in Chapter IV, the auditor should prepare for the termination before he starts, and since the consummation of an audit must include a report on his work, this fact must be kept in view during the progress of the work.

If feasible, the auditor should picture himself in his client's position and reason out what he would want if the other man were doing the work. The examination may be started under most favorable auspices, and it may be executed in an unexcelled manner; but if it is not reported upon properly, the first two factors will go for naught.

It hardly seems necessary to state that reports should be typewritten and an office copy preserved, yet auditors are frequently induced to submit manuscripts of which no copy is retained. Subsequent embarrassment has followed this unwise

practice, through loss of the original, unauthorized alterations therein, etc. It is better to keep a client waiting than to run such a risk. Promises to return reports for rewriting may not be kept, and the auditor who relies on these and similar promises ignores a precaution which experience has demonstrated to be valuable.

Something More Than Figures Are Wanted in a Report

A prominent banker recently said to the author that most of the reports submitted to him lack information which the auditor is peculiarly able to furnish. He said that auditors who are retained to investigate earnings, expenses, assets, and liabilities, frequently going back over a long series of years, have an unusually good opportunity, for instance, to size up the personnel of an organization, particularly the office staff, and also to a certain extent the other departments.

A banker is obliged to vouch for an enterprise as a whole when he offers its securities to his customers. He wants the assets and liabilities and net income stated in form suitable for publication, and requires that a certificate be attached which reads well; but he also wants a supplemental report for his own use, expressing the auditor's opinions on just as many points as the latter can comment on intelligently. He does *not* want trial balances and lists of debtors and creditors and memoranda of errors in postings and similar bookkeeping data. He reads only what is of interest to him and these things are not.

The same principle applies to the client whose own accounts are being reported upon by an auditor. The auditor secures access to records which the usual executive does not see, and has a chance to observe the staff under conditions which do not exist when the boss is around. This does not contemplate that the auditor shall report trivial matters which will make the staff hostile without being of any real benefit to the client.

Elsewhere in this book it has been pointed out that the successful auditor must secure and retain the hearty co-operation of the office staff. This fact is here reiterated as a reminder that

a report should be a constructive document, helpful to the client's staff as well as to the client. Occasions may arise where the auditor cannot prevent his report from arousing hostility on the part of the staff. If this must be, let it be because vital defects are criticized, not trivial ones.

Terminology

It is most important that an auditor express his findings and opinions in good, simple English. His aim must be to write so clearly that his report cannot possibly be misunderstood. He will not err if he follows the simple language of the Bible or of Lincoln and avoids the involved style of Henry James.

It has been said that accounts are the language in which business transactions are written. It is incumbent on the auditor to exemplify the fact that this language is a simple one, and readily understood. Classics may be read in dead languages, but commonplace business history is better understood if written in a live tongue.

Figures in themselves are of no value, but, correctly arranged and properly interpreted, the accounts of a business organization furnish a basis for knowledge which is indispensable in the successful conduct of any enterprise.

The truth *may* exist in a report poorly written, but if it is not evident to any interested party, then the language used is not well chosen.

An Illustration.—The following memorandum is submitted as suggestive only, but it is more than likely that it would be read through to the end by every man or woman having an interest in the enterprise in question.

Statement of Financial Condition of A and B

At the Close of Business, December 31, 1921

The total assets of the firm on this date amounted to $213,333, consisting of the following items: Cash in bank, $9,465. This is somewhat less

than is usually carried, but a number of bills were paid on December 31, which reduced the bank balance accordingly. Notes Receivable, $8,450. These are notes not yet due, and are all believed to be good. They can, if necessary, be discounted at the bank and furnish additional funds. Accounts Receivable, $29,416. These were gone over carefully on December 31, and an amount equal to all accounts long overdue was charged to income and carried to reserve for doubtful accounts. They are also carried in a separate ledger and are being carefully looked after, and a fair amount will no doubt be realized therefrom. The sales for the month of December were nearly $20,000, and, as practically all sales are on thirty days' time, it is evident that collections are in fine shape.

Stock was taken on December 31 and amounted to $39,460. The market was somewhat lower on that date than when most of the goods were purchased, so, in order to be conservative, the inventory was priced at market. All obsolete and damaged stock was inventoried, but was not valued. It is proposed to dispose of all this dead stuff as soon as possible, as it is in the way, and is the source of constant expense and annoyance. The inventory sheets have been securely bound and placed in the safe.

The insurance on stock aggregates $45,000, which is about 10 per cent in excess of the inventory. The rate, however, is only about 40 cents since the installation of the sprinkler plant, and, as the value of the inventory fluctuates from day to day, it is considered advisable to cover a small margin above the estimated stock. The insurance question comes up automatically once a week so that we cannot be caught unawares, as was the case recently with the X Y Z Company.

In November, we paid the insurance for an entire year in advance, so that on December 31 the proportion prepaid amounted to $762, which is carried as a current asset, because it should be charged against the operations of 1916. We also paid the discount on the notes at bank in advance to the extent of $412, and this is carried as an asset in the same way as the insurance.

On a conservative basis, the furniture and fixtures on hand on December 31 were worth over $6,000, but as liberal depreciation has been written off each year, this item now stands at $3,418. We are carrying insurance for $6,500, however, and in case of a fire there would be no trouble about adjusting the loss and proving our claim, as a carefully prepared schedule of each article, with date of purchase and cost price, is kept in the safe.

Our land and buildings are now carried at a net valuation of $84,710, made up as follows: cost of land in 1901, $50,000; cost of buildings, $49,862. We have carried to our reserve account annual depreciation at the rate of 4 per cent per annum, reducing the accounts to $34,710. This

rate is probably too high, as 2½ per cent per annum is stated to be the proper rate of depreciation on buildings like ours, but, as the depreciation is charged into the expenses every year, it keeps us on the safe side when figuring our costs, and, if it should ever be considered advisable to tear down some of our older buildings, the rate of depreciation charged will be justified. The machinery account now stands on our books at a net valuation of $37,240. The original cost of the machinery now installed in the plant was over $60,000, but depreciation at rates varying from 10 to 20 per cent per annum has been charged on the same theory as with buildings. Much of our machinery is of a type which is subject to improvements and new inventions, and, as has been the case in the past, some so-called modern machines may become obsolete overnight. If our machinery account were carried on our books at cost or nearly so, as is done by some of our competitors, we would no doubt be afraid to abandon it for fear of the resulting shrinkage in our assets, but the liberal depreciation charged and the consequent margin in this account permit us to keep absolutely up to date with our entire equipment. Unquestionably a fair share of our continued success as manufacturers is due to this policy.

Our auditors tell us that they have never examined the affairs of a single bankrupt concern where the machinery account was not inflated by reason of insufficient depreciation being written off, and they point out that the moral is obvious.

The depreciation on buildings and machinery is not deducted directly from the respective accounts, but is carried separately as a reserve. The reason for this is that in case of fire we can submit the cost of all the buildings and machinery to the adjusters and show them the accounts in the books. We have a subsidiary building and machinery ledger, which shows each building and each machine separately with cost of installation, etc. The aggregates of the detailed items in this ledger agree exactly with the totals in the general ledger.

If a fire occurred it would be a matter of negotiation as to the deductions for wear and tear, and, as the adjusters would be obliged to make their calculations on a basis of the life of the buildings and machines or their replacement cost, we ought to realize a much larger amount than that shown in the balance sheet. This conservative valuation not only means that we are not fooling ourselves, but our banks realize that we are not fooling them and compliment us on our method every time it is explained to them.

The President of the National Bank told us a short time ago that he believes we can borrow a larger amount on our statement as it is made up than some concerns whose plants may have cost far more, but whose

methods are not as conservative. The distrust occasioned by lack of conservatism leads a banker to discount all the assets ruthlessly, while with us they feel perfectly safe in relying on our figures and "go the limit" when we ask for credit.

The assets referred to above aggregate at their reduced valuation $213,333. The total liabilities on December 31 amount to $74,493, leaving net capital invested in the business $138,840, of which there stands to the credit of Mr. A $74,910, and to the credit of Mr. B $63,930.

The liabilities in detail are as follows:

Bills payable, $18,500, consisting of three notes for $5,000 each, and one for $3,500. The former were discounted at the National Bank and are due January 25, February 25, and March 25. The $3,500 note was discounted at the Citizens Bank and is due February 25. As our purchases are increasing, due to the approach of the busy season, these notes will have to be renewed and additional funds secured. Our line at the National Bank is now $40,000, and at the Citizens Bank $25,000. This is more than sufficient to carry us through the season and will enable us to discount all our bills. The unpaid accounts payable for purchases on December 31 amounted to $24,218. No bills are overdue, and all invoices carrying cash discounts have been paid.

The collections which are sure are not sufficient to meet all of our bills on our regular pay day (the 20th), so $10,000 should be borrowed, say on the 18th. The accrued wages up to the night of the 31st amounted to $1,340.

The taxes accrued to the same date amounted to $435. This represents a tax rate of 2 per cent, which is a decided advance over last year. We are unable to discern any additional benefits arising out of the increase, and it might be in order to suggest to the municipal authorities that it is up to them to establish efficiency and cost records and justify the enormous sums they are expending annually in an apparently aimless manner.

The only remaining liability is the mortgage for $30,000 on the real estate. As the interest rate is 5 per cent and as it is not due for three years, no action with respect to this debt is suggested.

The foregoing narrative is necessarily colorless and lacks the local flavor which can easily be woven about the balance sheet of a going business, so that as read *solely* by those connected with the particular undertaking, one item after another awakens interest and stimulates action with respect to those figures which appear to be unfavorable.

It is not hard to imagine a state of affairs different from that

described, and it is quite within reason to prophesy that a description of balance sheets, cleverly written in the manner described, will lead to decisive action on the part of an executive regarding unfavorable items, although previous efforts along routine lines have failed. In any event, it is well worth trying, particularly in connection with an income or trading statement, in which comparisons are important and instructive. An occasional witticism or business "story" is not out of place, assuming always that a proper diagnosis has been made of the executive to whom the report is addressed.

Federal Trade Commission Requirements.—The Federal Trade Commission, to protect the public from losses due to unreliable promotions and prospects which were being offered as "high-class investments," adopted a form of inquiry blank which new companies were directed to fill out and forward to the Stock and Securities Division of the Commission at Washington. The following information is requested under the headings of "Properties" and "Financial Condition."

Properties

Describe accurately, but briefly, the properties acquired or to be acquired, real and personal, with all improvements or plant now or to be placed thereon, the amounts paid or to be paid in money, stocks, bonds, securities or otherwise, therefor and the actual value of each portion or parcel thereof.

Financial Condition

Annex a copy of the trial balance sheet and profit and loss statement, prepared for the purpose of your report hereunder or made up within thirty days prior to the date of this notice.

Attach a copy of the last annual and last quarterly balance sheet and profit and loss statement.

As to the assets enumerated therein, describe briefly each item and state the actual cost and the present estimated value thereof.

State the book value of each class of stock per share and the estimated actual value thereof, eliminating all doubtful, contingent, speculative or excessively valued assets, stating what is eliminated and why.

Would not the prospective stockholder be protected to a greater extent if the Commission requested a statement certified by reputable accountants, prepared so that the Commission could determine the status of the company? Undoubtedly, in some instances such a request might tend to discourage over-enthusiastic or unscrupulous promoters and save the public.

Scope of Report

Certificates and reports, if true, must be founded on the work which has been done. A report should be a narrative of facts. It may include a short history of the enterprise under audit, particularly when it is intended for the perusal of those whose information on this point is limited.

A certificate should be brief and to the point and should embody conclusions based solely on the auditor's investigations.

A report is for the edification of others, and therefore it is the duty of the auditor to make it interesting. The most successful auditors pay much attention to this aspect of their work; consequently, clients are glad to get their reports and read them.

How much space should be given to the detailed work done by the auditor? The average client does not care how the auditor arrives at his results—all he wants is information. He asks: "Are the accounts correct, or, if not correct, wherein are they inaccurate, and how shall they be improved?"

Some auditors who have not verified every item on the books think that they escape responsibility by detailing all of the ground covered. If work is omitted which should have been performed, a carefully worded report which points out what work was done but which omits any mention of the work in question cannot be used by the auditor to escape liability.

Reports must be founded on facts discovered, verified, or compiled by the auditor, but it is neither desirable nor necessary to comment on immaterial matters or furnish superfluous schedules.

The purpose for which the report is to be used must in every

case be carefully considered before it is written. For instance, a prospective borrower does not want an auditor to submit a balance sheet which is accompanied by comments on the system of accounts, nor does he want long schedules of clerical errors. On the other hand, it is quite in order to submit a balance sheet accompanied by qualifying comments, provided the changes which the auditor thinks should be made in the balance sheet figures are not permitted to be made in the books, or provided the balance sheet items are not sufficiently self-explanatory. It is usually desirable and convenient to comment on balance sheet items in the same order in which they appear on the balance sheet.

Requirements Outlined.—Where balance sheets are not designed for publication, the most satisfactory report consists of the following:

Comments on the audit and on the balance sheet.
The balance sheet, supported by detailed schedules wherever they are necessary or deemed to be of practical use.
The income statement, divided into sections or groups and supported by schedules if required.
Special schedules.

When a report contains numerous comments it is not necessary to insert a formal audit certificate in the text. It is, however, a matter of taste. Some auditors observe the practice of commencing their reports with formal certificates, but in most cases they look out of place.

Certificate of Audit

The certificate should be as short and concise as possible. Attempts to qualify a certificate are not regarded with favor, and, unless the scope of the audit is greatly restricted, it is the auditor's duty to conform as nearly as possible to the "audited and found correct" style. Of course, when qualifications are necessary they must go in without fear or favor; but the point the author has in

mind is the evident fear of many accountants that their certificates will be taken seriously and acted upon. In this fear they hedge themselves about with all sorts of ambiguous qualifications. Sometimes these sound like arguments, i.e., the certificate reads in effect that if so and so were done, so and so would be the result. Most business men gladly listen to sound arguments *before* the report is written, therefore changes recommended may as well be made in the balance sheet and thus permit the giving of an unqualified certificate, which is always the most desirable.

ILLUSTRATIONS.—Seven forms of certificates applicable to a variety of conditions are shown below.

A form, variations of which are used by leading auditors, is as follows:

THE BOARD OF DIRECTORS,
A B C COMPANY.

We have audited the accounts of the A B C Company for the year ended December 31, 1921.

We verified the Cash, the Inventories of Raw Materials and Supplies, Work in Progress, and Finished Product, and the other current assets as of December 31, 1921.

The Raw Materials and Supplies on hand and in process of manufacture were priced at cost, except that where market values at December 31, 1921, were less than cost, the inventories were reduced to market values. Sufficient reserves have been made for probable losses on notes and accounts receivable.

We examined the charges to capital accounts and find them to represent actual additions to the Company's property. Ample allowances have been made for depreciation of plants. All known liabilities have been included in the accounts.

WE HEREBY CERTIFY that in our opinion the accompanying balance sheet and income account correctly present the financial condition of the Company as of December 31, 1921, and its operations for the year ended with that date.

(Signed) X Y Z,
Certified Public Accountants.

If qualifications are necessary, the above form can be used as a basis and the qualifications mentioned in their proper place.

As mentioned heretofore, some certificates require as much analysis as the figures themselves. In such cases it may be better to omit the certificate in the annual report of a corporation, since its wide publication, chiefly for those who need simple rather than complicated reports, is likely to do more harm than good. The following auditor's certificate (with slight changes) was circulated in July, 1921, to many thousands of stockholders of a large corporation. The balance sheet contained many details, yet the certificate itself was about as complicated. The certificate was substantially as follows:

We have audited the head office books and accounts of the A, B, and C Companies at....., and of the two independently operated subsidiary companies at.....and....., and of D Company at ....., for the year ending May 31, 1921, and, accepting the financial reports and balance sheets submitted to us for all other subsidiary companies, district offices and branches, whose books we have not audited, we find that the above Consolidated Balance Sheet is correctly prepared therefrom.

We have scrutinized the expenditures added to property accounts, and are satisfied that the respective items are of the nature of actual additions or permanent improvements, and are properly chargeable to capital account. All expenditures during the year for replacements and maintenance aggregating $..... have been charged against operations and in addition a further provision has been made for depreciation.

The inventories of raw materials and manufactured products on hand are valued at cost or market price, whichever was the lower, and the quantities of all inventories shown by the system of cost accounting have been confirmed by actual count or measurement as at May 31, 1921, made by responsible officials.

The head office cash, notes and other securities have been verified by actual inspection or certificates from depositaries and due provision has been made for all outstanding liabilities except possible additional federal taxes.

Upon the basis above indicated, we certify that in our opinion the above Consolidated Balance Sheet is a full and fair statement, and is properly drawn up so as to show the true financial position of A Company and its subsidiary companies at May 31, 1921.

(Signed) J K L,
Certified Public Accountants.

In support of the argument for a short form of certificate, the president of a large bank wrote to the author recently, saying *inter alia*, "We frequently observe certificates which require as close an analysis as the figures themselves. Some standardized form of audit which would carry with it all that the word implies, would be most acceptable, I think, to bankers generally."

Where a shorter form is required for a certificate which is to be appended to the condensed balance sheet used by note-brokers and others, the following is acceptable:

We have audited the accounts of the D E F Company for the year ended November 30, 1921, and

WE CERTIFY that the above balance sheet and income account agree with the books and in our opinion correctly set forth the financial condition of the Company as of November 30, 1921.

(Signed) R S T,
Certified Public Accountants.

A form of certificate suggested in "Uniform Accounting," a tentative proposal submitted by the Federal Reserve Board, etc., is as follows:

I have audited the accounts of Blank & Co. for the period from..... to.....and I certify that the above balance sheet and statement of profit and loss have been made in accordance with the plan suggested and advised by the Federal Reserve Board and in my opinion set forth the financial condition of the firm at.....and the results of its operations for the period.

The following forms are also used:

We have examined the accounts of the A B C Company as of..... 192.. and certify that, in our opinion, the above balance sheet correctly sets forth the Company's financial position at that date.

(Signed) D E F,
Accountants and Auditors.

We have made an examination of the accounts of the A B C Company and its subsidiary companies as at.....192.. and (subject to the

valuation of plants and trade-marks being correct) we certify that in our opinion the above consolidated balance sheet and the accompanying statement of earnings set forth correctly the financial condition of the corporation and its subsidiaries at that date, and their operations for the year then ended.

(Signed) X Y Z,
Accountants and Auditors.

New York.....192..

We have audited the accounts of A Company for the year ended ..... The cash in banks was verified by certificates from the depositaries. The accounts receivable were verified from the Company's books and examined as to their collectibility. The inventories have been certified to us as to quantity by responsible officials of the Company, and have been ascertained by us to have been valued at not more than cost.

Ample reserves have been made for depreciation of plant. No expenditures have been charged to the plant during the year which were not for actual additions or improvements.

From its accumulated net profits, the Company paid, in....., the sum of $..... into its First Preferred Stock Sinking Fund, to meet the requirements of its Certificate of Incorporation. First Preferred Stock to the extent of $..... par value was canceled through the operation of this Sinking Fund.

We Hereby Certify that, in our opinion, the accompanying balance sheet of....., is a correct statement of the A Company's financial condition at that date and that the accompanying income account correctly summarizes the results of the business for the year ended.

(Signed) B, C and D,
Certified Public Accountants.

(Date)

"As of" Date of Balance Sheet.—The question sometimes arises, how to submit a balance sheet and report thereon when the audit is made so long after the balance sheet that adjustments cannot be made as of that date, and when the auditor cannot certify that the balance sheet "agrees with the books and is correct." The best way is to have the entries journalized before the report is written, and, no matter how long after the date, the entries should read "as of" the date of the balance sheet. When

posted to the ledger the items should be connected with the closing date by means of a star or asterisk. Subsequent trial balances and any subsequent references will then find the accounts in order, and there can be no difficulty if it becomes necessary to reconcile them with the balance sheet.

Wherever the auditor's recommendations as to adjustments of asset or liability items are not or cannot be adopted and recorded "as of" the date of the balance sheet, the most satisfactory form of report thereon is to submit the balance sheet as shown by the books and precede this with comments which should be bound with, and permanently attached to, the balance sheet, so that improper use cannot be made of the balance sheet by removing the qualifying comments.

USE OF WATERMARKED PAPER.—Clients do not always appreciate the position of an auditor with respect to the use of balance sheets. Experience shows that they frequently hope for a more favorable statement than they receive, and since the audit may be for the purpose of securing credit, an unfavorable statement places the client in an embarrassing position. Auditors must always be on guard, therefore, to see that balance sheets made up by them and subject to qualification are not submitted in such form as will admit of their being separated from such qualifications.

Basing his opinion on long experience of his own and other firms, the author believes that the only safe method of reporting is to use paper bearing one's own watermark. This is not very expensive when a considerable quantity of paper is used.

If an auditor is able to construct his own balance sheet and can certify thereon that it is correct, it does not make any difference whether or not it is separated from the comments. In fact, it is usually preferable to submit such a balance sheet complete in itself.

Form of Balance Sheet

Many tiresome pages have been written explaining, or trying to explain, why it is that universal American custom decrees that

assets shall be placed on the left-hand side of the balance sheet and liabilities on the right-hand side. The explanation is no more satisfactory than the reasons advanced by English authorities to support their custom of placing liabilities on the left and assets on the right.

The author ventures the following:

The English practice is purely the outcome of custom. A long time ago someone started that way and everyone since has followed, until now the form has the sanction of law. The only sound reason the author can think of for the custom is that a conservative Englishman looks for his liabilities first and then looks to see if he has enough assets to discharge them.

In the United States, accountancy has developed more scientifically than in England. If a short cut is logical we take it. When it was found that loose leaves were far more convenient and economical to handle than leaves bound permanently together, we adopted them. So with balance sheets. It was observed by accountants that the average American looks for his assets first and subsequently glances at his liabilities in order to assure himself that his excess of assets is as much as he believes it to be.

Furthermore, it is common sense for a man who decides to record his financial condition to place his possessions first. Frequently a man has few or no liabilities, so that the practice of stating the assets first, then the liabilities, if any, as a deduction therefrom, thus arriving at the surplus, is the logical presentation applicable to the great majority of business enterprises in the United States.

Account Form of Balance Sheet.—What may be styled the account form of balance sheet is one with the assets on the left and the liabilities and net worth on the right. This permits an agreement between the totals of the two sides. Sometimes a deficit exists and the bookkeeper's passion for making things balance is so strong that the deficit is included among the assets! The almost incredible result is that practically all published balance sheets consist of a confusion of figures on both sides which exactly agree in total. The reader thereof who is not trained in

accounts does not comprehend the details, but he is reassured in some mysterious way when he finally discovers that the liabilities at least do not exceed the assets.

AN IDEAL BALANCE SHEET.—The author's conception of an ideal balance sheet is one which sets forth:

1. The assets, properly valued and grouped, and arranged in the order of their availability.

English law and custom may be against this form, but nevertheless it is the most readable and the most understandable to the average business man. Furthermore, it has the sanction of the bankers and credit men of this country, who use balance sheets more often than any other class of men.[1]

2. The liabilities also properly grouped and arranged in the order in which they will, or should, be discharged.

3. If possible, the excess of the assets or the liabilities should next be shown, in order that the net worth or capital of the enterprise may be clearly apparent to anyone interested.

4. A statement showing to whom the excess belongs or from whom it is due. That is, if a corporation, there should be shown the capital stock issued, the addition thereto if a surplus of assets exists, or the deduction therefrom if there is a deficiency.

These concepts are illustrated in the following form:

Assets

Current Assets:		
Cash	$.....	
Notes and Accounts Receivable	.....	
Inventories	.....	
Prepaid Insurance, etc.	.....	$.....
Deferred Charges:		
Bond Discount, etc.		.....
Plant Assets:		
Real Estate	$.....	
Machinery, Fixtures, etc.	.....	.....
Good-Will, Patents, etc.		.....
		$.....

[1] See official forms, pages 372–373, 378, 382, 387, 389, 391, 395.

Liabilities

Notes Payable	$.....		
Accounts Payable	.....		
Accrued Wages	.....		
Reserves (not deductible from assets)	.....	$.....	
Bonded Debt	.....	.....	.....

Excess of Assets
(Or Net Worth)

Capital Stock	$.....	
Surplus (or Deficit)	.....	$.....

Popular Forms of Balance Sheets.—Among large industrial corporations which publish their balance sheets, the most popular form is as follows:

Assets			*Liabilities*		
Plant Assets:			Capital Stock		$.....
(Including Real Estate, Machinery, Patents, Good-Will, etc.)		$.....	Bonded Debt		.....
Deferred Charges to Operations:			Current Liabilities:		
Insurance, Interest, etc., Prepaid		.....	Notes Payable	$.....	
Current Assets:			Accounts Payable	.....	
Inventories	$.....		Accrued Wages, etc.	.....	.....
Accounts and Notes Receivable	.....		Reserves		.....
Cash	.....	.....	Surplus		.....
		$.....			$.....

The above arrangement is not easy reading for one unaccustomed to accounts, moreover it presupposes that the reader can discriminate between actual liabilities and surplus. The inclusion of surplus under a caption which is misleading, is unfortunate, especially when such procedure is unnecessary.

The following form is preferable:

American Manufacturing Company, Incorporated

Balance Sheet, December 31, 1921

Assets

Current Assets:		
Cash		$ 100,000.00
U. S. Government Bonds (insert basis of valuation)		300,000.00
Certificates of Deposit		200,000.00
Accounts Receivable, net of Reserves		350,000.00
Notes Receivable, net of Reserves		90,000.00
Inventories, at or below cost:		
Raw Materials	$110,000.00	
Merchandise, finished and in process	230,000.00	340,000.00
Prepaid Insurance, Interest, and other items paid in advance		20,000.00
Miscellaneous Supplies		10,000.00
		$1,410,000.00
Advances to Subsidiary and Affiliated Companies (when less than 50 per cent ownership)		210,000.00
Investments, other than U. S. Government Bonds (insert basis of valuation)		400,000.00
Plant (net of depreciation):		
Land	$100,000.00	
Buildings	205,000.00	
Machinery and Equipment	340,000.00	
Furniture and Fixtures	20,000.00	
	$665,000.00	
Less: Reserves	95,000.00	570,000.00
Patents		145,000.00
Good-Will		700,000.00
		$3,435,000.00

Liabilities

Current Liabilities:		
Notes Payable, banks and bankers		$ 170,000.00
Accounts Payable, trade creditors		180,000.00
Accrued Liabilities:		
Wages, Commissions, etc.	$20,000.00	
Interest, Royalties, Taxes, etc.	50,000.00	70,000.00
Reserves for Taxes:		
Federal Taxes	$210,000.00	
State and other Taxes	30,000.00	240,000.00
		$ 660,000.00
Bonded Indebtedness:		
First Mortgage 7 per cent Bonds, due January 1, 1929		500,000.00
		$1,160,000.00

Capital

Capital Stock:		
Preferred, 7% cumulative (Authorized $1,000,000)	$ 880,000.00	
Common	1,000,000.00	
	$1,880,000.00	
Surplus	395,000.00	2,275,000.00
		$3,435,000.00

We have examined the accounts of the American Manufacturing Company, Incorporated, and (subject to the valuation of Plant, Patents, and Good-Will being correct) we certify that, in our opinion, the above Balance Sheet correctly sets forth the financial position of the Company as of December 31, 1921.

New York, January 25, 1922.

It is asserted that there is a demand for the form of balance sheet given on page 368 from those whose chief desire is to see the relation of the fixed assets to the capital stock. But this information can be more readily secured from the above form, because where fixed items appear first it is usual to place the capital stock first among the liabilities and the surplus last. Since the surplus may be as large as or larger than the capital stock, it is very necessary to have these figures in juxtaposition, as provided in the second form.

It is, of course, impossible to mention by name the assets and liabilities which are found in different enterprises; therefore these outline forms must be considered as suggestive only. In other chapters of this book is pointed out the importance of the auditor's placing himself as nearly as possible in the position of the one who is to use the accounts. It is hoped that these suggestions will be more helpful in framing a balance sheet than would a set form which might apply in a few cases, but which would be restrictive and therefore of little value in others.

One general principle which should be observed in all balance sheets is that the matter of the arrangement of the groups is not of so much importance as is the relation of one to another. That is, it does not greatly matter whether the fixed assets are placed first or last, but it is important that the balance sheet shall indicate, if possible, the relation of the fixed assets to the other assets and to the liabilities. For instance, a concern owning a million dollars of fixed assets should have a capital and surplus, or funded debt, of at least as much, otherwise the current liabilities would be excessive.

Proposal of Federal Reserve Board.—On pages 372 and 373 is a balance sheet form suggested in 1917 by the Federal Reserve Board, as a tentative proposal, in "Uniform Accounting."

In this form the item "deferred charges" is not included in current assets; no provision is made for the segregation of items such as stripping costs in a mine, bond discounts, etc.

In modern practice deferred charges appear in their proper place in the balance sheet.[2] Instead of showing good-will as an asset, the book value is deducted from capital. The suggestion is unique. No doubt the intention was to show net worth exclusive of good-will. The suggestion does not accord with the usual practice. In a later (1921) Federal Reserve form[3] good-will appears among the assets.

Comparative Value of Condensed and Detailed Forms.—The condensed forms of balance sheets shown on pages 367 and 369 illustrate the order in which the assets and liabilities should be stated, but do not convey as much information as should be furnished; the more detailed form suggested by the Federal Reserve Board is preferable. There is some reluctance on the part of corporations to the use of the complete form; but creditors and stockholders are entitled to balance sheets which tell the whole story, and within reasonable limits they should demand more complete information than is found in the ordinary condensed balance sheet.

Contingent Liabilities.—From an accounting standpoint there are four different ways of showing contingent liabilities on the balance sheet. *Method one*, which is the best where practical, is to show the contingent liability as a contra item to the corresponding contingent asset. For instance, when notes receivable are discounted, a corresponding amount of cash (less discount) is received. Instead of omitting mention of the notes receivable, they should be retained upon the balance sheet as a contra item to notes receivable discounted upon the liability side, both amounts affecting the balance. *A second method* is to show gross amount of the notes receivable and deduct from them the amounts which have been discounted, showing the net amount on the assets side of the balance sheet. *A third method* is to omit mention of the notes receivable which have been discounted but

[2] See page 115.
[3] See page 387.

FEDERAL RESERVE BOARD

Assets

Cash:		
1a. Cash on hand—currency and coin	.....	
1b. Cash in bank	.....	.....
Notes and accounts receivable:		
3. Notes receivable of customers on hand (not past due)	.....	
5. Notes receivable discounted or sold with indorsement or guaranty	.....	
7. Accounts receivable, customers (not past due)	.....	
9. Notes receivable, customers, past due (cash value, $....)	.....	
11. Accounts receivable, customers, past due (cash value, $....)	.....	
	.....	
Less:		
13. Provisions for bad debts		
15. Provisions for discounts, freights, allowances, etc	.....	.....
Inventories:		
17. Raw material on hand	.....	
19. Goods in process	.....	
21. Uncompleted contracts		
Less payments on account thereof	.....	
23. Finished goods on hand	.....	.....
Other quick assets (describe fully):		
.....	.....	
.....	.....	.....
Total quick assets (excluding all investments)		.....
Securities:		
25. Securities readily marketable and salable without impairing the business	.....	
27. Notes given by officers, stockholders, or employees	.....	
29. Accounts due from officers, stockholders, or employees	.....	.....
Total current assets		.....
Fixed assets:		
31. Land used for plant	.....	
33. Buildings used for plant	.....	
35. Machinery	.....	
37. Tools and plant equipment	.....	
39. Patterns and drawings	.....	
41. Office furniture and fixtures	.....	
43. Other fixed assets, if any (describe fully)	.....	
.....	.....	
	.....	
Less:		
45. Reserves for depreciation	.....	
Total fixed assets		.....
Deferred charges:		
47. Prepaid expenses, interest, insurance, taxes, etc		.....
Other assets (49)		.....
Total assets		.....

Form of Balance Sheet

Liabilities

Bills, notes, and accounts payable:
Unsecured bills and notes—
2. Acceptances made for merchandise or raw material purchased .....
4. Notes given for merchandise or raw material purchased .....
6. Notes given to banks for money borrowed .....
8. Notes sold through brokers .....
10. Notes given for machinery, additions to plant, etc.
12. Notes due to stockholders, officers, or employees.. ....

Unsecured accounts—
14. Accounts payable for purchase (not yet due) .....
16. Accounts payable for purchases (past due) .....
18. Accounts payable to stockholders, officers, or employees ....

Secured liabilities—
20a. Notes receivable discounted or sold with indorsement or guaranty (contra) .....
20b. Customers' accounts discounted or assigned (contra) .....
20c. Obligations secured by liens on inventories .....
20d. Obligations secured by securities deposited as collateral ....

22. Accrued liabilities (interest, taxes, wages, etc.).. ....

Other current liabilities (describe fully):
....
....

Total current liabilities ....

Fixed liabilities:
24. Mortgage on plant (due date.....) .....
26. Mortgage on other real estate (due date.....) .....
28. Chattel mortgage on machinery or equipment (due date.....) .....
30. Bonded debt (due date.....) ....

32. Other fixed liabilities (described fully):
....
....

Total liabilities ....

Net worth:
34. If a corporation—
(*a*) Preferred stock (less stock in treasury) .....
(*b*) Common stock (less stock in treasury) .....
(*c*) Surplus and undivided profits .....
.....
Less:
(*d*) Book value of good-will .....
(*e*) Deficit ....

36. If an individual or partnership—
(*a*) Capital .....
(b) Undistributed profits or deficit ....

Total ....

to indicate the notes receivable discounted as a contingent liability on the liability side, and write the amount short to indicate that they have not been included in the total. *A fourth method*, probably the simplest and most useful of all, is to asterisk the notes receivable and call attention in a footnote that a certain proportion of notes receivable (stating the exact amount) have been discounted.

Reserves Must Be Segregated from Surplus.—As stated elsewhere, reserves (other than those representing mere subdivisions of surplus) should be deducted from assets or included among liabilities; any other treatment is grossly misleading. In a form of balance sheet published by the Cleveland Clearing House Association there are two groups of liabilities, viz.: (a) current, and (b) a general group which includes bonded debt and "any other liabilities." The two groups are aggregated under the caption "total liabilities." Surely a reader of the balance sheet would be justified in assuming that the deduction of "total liabilities" from total assets would produce net worth; but such is not the case. Further down in the balance sheet after the caption "total liabilities" appears a caption "reserves." The form is a very bad one as it improperly induces the concerns which use it to overstate net worth. The seeker of credit using the official form mentioned can hardly be criticized if he hesitates to deduct reserves from assets or fails to include them among liabilities.

Comparing Assets and Liabilities.—Opposite is shown a form of balance sheet which purports to bring out comparisons of current assets and liabilities, and so on. It is not a bad form if properly used; but the large item of current liabilities which is inserted between capital stock and surplus, instead of being included among other current liabilities, is apt to deceive those who use the balance sheet.

Surplus—No-Par Value Stock.—In case of no-par value stock it is important that capital surplus and earned surplus be

Balance Sheet of the X Y Z Company

December 31, 1920

			Assets	*Liabilities*
Current Assets:				
Cash		$ 5,200,000.00		
Notes Receivable		1,400,000.00		
Accounts Receivable		10,600,000.00		
Refined Products on hand		7,400,000.00		
Crude Oil on hand		1,500,000.00		
Material and Supplies		4,700,000.00	$30,800,000.00	
Current Liabilities:				
Accounts Payable				$ 6,400,000.00
Deferred Charges			300,000.00	
Deferred Credits				1,500,000.00
Permanent Assets:				
Oil Lands, Leases and Contracts	$25,000,000.00			
Less: Reserve for Depletion	12,200,000.00	$12,800,000.00		
Field and Refinery Construction	$31,800,000.00			
Less: Reserve for Depreciation	6,400,000.00	25,400,000.00		
Investments in Other Companies		7,700,000.00		
Miscellaneous Securities		5,000.00	45,905,000.00	
Capital and Surplus:				
Capital Stock				31,400,000.00
			$77,005,000.00	$39,300,000.00
Reserve for Taxes Accrued				3,800,000.00
Surplus				33,905,000.00
			$77,005,000.00	$77,005,000.00

separated. The current annual report of a large corporation shows no-par value stock "declared at $5 per share"; surplus is given at $126,369,005.75. The net profit for the year is stated to be $16,179,939.21. As the corporation had only been organized one year it is obvious that a very large part of the surplus is capital surplus. The balance sheet is not understandable because capital and earned surplus are not separated. In order to show the true status of affairs it is necessary to segregate capital stock, capital surplus, and earned surplus. Usually the state laws require that a minimum value be ascribed to no-par value shares, irrespective of the number issued. Bearing this in mind the arrangement of these items in the balance sheet should be essentially as is shown below:

Stock of No-Par Value:
..... shares authorized at $.. per share.
..... shares issued.

Capital Surplus
This item should represent the excess of assets over liabilities at the formation of the company, plus or minus capital gains or losses. Changes in capital surplus occurring after incorporation should be shown on the balance sheet.

Earned Surplus
This should show the net result of operations after incorporation.

Treatment of Debts Subordinated.—When large stockholders (or, in case of partnerships, when partners) advance funds which are not intended to be capitalized, it is fairly common to subordinate such loans to all other creditors. When this is done there should be a distinct segregation in the balance sheet in order that the concern may get the full benefit of its reduced liabilities as compared with other creditors.

Balance Sheet Adjusted to New Capital.—Sometimes balance sheets are published "giving effect to new capital to be supplied." When this is done the auditor must be sure that the capital has been underwritten by responsible parties and that

legal steps have been taken to retire old liabilities, etc. He must include the net, not the gross, proceeds of the new issue.

British practice seems to be: (1) to set up assets as at the last closing date, deduct the liabilities, and to the balance to add "proceeds of present issue after payment of purchase price"; or (2) to add the proceeds of the issue to the assets before deducting the liabilities.

Statement Required by Banks

For some years bankers have required borrowers to furnish statements of their assets and liabilities. At first a uniform statement was not insisted on, but it was found that some borrowers were disinclined to submit full reports while others did not know what details the banker wanted. Individual banks thereupon compiled their own forms and furnished blanks to their customers. These blanks were by no means uniform, and since many borrowers used more than one bank, the diversity became a nuisance to both banks and borrowers. The former, in exchanging credit information with other banks, found comparisons difficult, and the latter were put to unnecessary trouble in arranging and rearranging their statements.

American Bankers' Association Form.—Finally an attempt was made through the various bankers' associations to formulate a uniform or standard blank which would embody the information most useful to banks. The form on pages 378 to 380 is that designed and officially approved by the American Bankers' Association.

Need of Proper Audits.—To a professional auditor, the provision in the form for a statement by the borrower whether or not the books have been audited by a certified public accountant is of particular interest. This question was suggested by the late James G. Cannon, of New York City, who for many years advised bankers to employ professional auditors more generally.

Unfortunately for both bankers and auditors, the former

Form No. 2—CORPORATION—Manufacturing or Merchants. FORM DESIGNED AND APPROVED BY THE AMERICAN BANKERS ASSOCIATION.

Statement of .....

Business ..... Address .....

Branches .....

TO .....

For the purpose of procuring and maintaining credit from time to time in any form whatsoever with the above named Bank, for claims and demands against the undersigned, the undersigned submits the following as being a true and accurate statement of its financial condition on the following date, and agree that if any change occurs that materially reduces the means or ability of the undersigned to pay all claims or demands against it, the undersigned will immediately and without delay notify the said Bank, and unless the Bank is so notified it may continue to rely upon the statement herein given as a true and accurate statement of the financial condition of the undersigned:

Condition shown by.....books and inventory of.....19.....

ASSETS:				LIABILITIES.			
Cash on hand and in bank,				Due on open accounts,			
Accounts of customers (good),				Acceptances:			
Notes and acceptances of customers (good),				(1) Issued in payment for merchandise,			
Merchandise (at cost):				(2) Other acceptances,			
(1) Manufactured,				Notes payable for merchandise,			
(2) Raw material,				Notes payable to own banks,			
(3) Stock in process,				Notes sold through brokers,			
Total quick assets,				Notes payable to others,			
Notes and accounts due to us by controlled or allied concerns,				Money on deposit with us,			
Plant and machinery,				*Notes and accounts due by us to controlled or allied concerns,*			
Furniture and fixtures,				Other current debts (itemized)			
Real estate (value: mortgage entered in liabilities),							
Other assets (itemized)				Total current liabilities,			
				Bonded debt—when due.....			
				Capital—Preferred,			
				Common,			
				Surplus,			
				Reserves,			
				Notes receivable and acceptances discounted or sold with endorsement or guarantee (contingent liability),			
TOTAL,				TOTAL,			

Condensed Profit and Loss Statement for the Fiscal Year Ending.....19.....

EXPENSE.				INCOME.			
Cost of material or merchandise consumed,				Net sales,			
Actual expense of conducting business. Including rent, taxes, insurance, etc.,				From investments,			
Salaries paid to officers,				From discounts on purchases,			
Interest on borrowed money and bonds,				From other sources (itemize),			
Bad debts charged off,							
Depreciation charged off,							
Net profits,							
TOTAL,				TOTAL,			

RECONCILEMENT OF SURPLUS.

Undivided surplus at close of previous fiscal year,		$.....
Less charges not applicable to current year,	$.....	=$.....
Add net profits as above,		$..... =$.....
Less dividends Preferred (.....per cent),		$.....
Less dividends Common (.....per cent),		$..... =$.....
Undivided surplus,		

(See Reverse Side.)

CONTINGENT LIABILITY.—We have no contingent liability of any kind as endorser or guarantor not noted above (except as follows):

Our merchandise is insured for $..... Plant, building and machinery, $.....

Life insurance for benefit of company amounts to $.....

None of the accounts or notes receivable in the within statement have been assigned, pledged or discounted (except as follows):

Neither have any of our other assets been pledged or assigned as collateral for any of our liabilities (except as follows):

Assets on which mortgages and bonds are a lien.....

Our company is incorporated under the laws of the State of.....

We have no interest in any other concern except (name affiliations and location).....

There are no suits pending against us (except).....

The form of obligation used in the financing of our business is our plain note (endorsed by) .....

None of the endorsers guarantee or endorse the paper of other concerns or individuals (except) .....

Outside resources of endorsers are.....

Our { commercial paper is / acceptances are } placed through (name broker or brokers).....

Our books { are not / are } audited by a certified public accountant.....

The date of last audit was.....made by .....

BANK ACCOUNTS	LINES GRANTED	Under Discount on Statement Date

Principal Creditors	References

OFFICERS AND DIRECTORS

.....President. .....

.....Vice-President. .....

.....Treasurer. .....

.....Secretary. .....

(Please sign here).....

Date signed ..... By.....

ASSETS		LIABILITIES	
Cash		Notes Payable	
Bills Receivable (net)		Accounts Payable	
Accounts Receivable (net)		Deposits	
Merchandise		Bonded Debt	
Land		Mortgages	
Buildings		Accrued Liabilities	
Machinery—Fixtures		TOTAL	
.....		Capital	
.....		Surplus—Profits	
.....		Reserves	
TOTAL		TOTAL	

CONTINGENT LIABILITIES. On bills receivable discounted.....Other.....

CASH. On hand and in bank, $.....Names of banks.....

BILLS RECEIVABLE. Any overdue or doubtful?.....Any from officers, directors, sub-companies, or similar sources.....

ACCOUNTS RECEIVABLE. State amount doubtful, not from customers or in any way not realizable within immediate future....

MERCHANDISE. Finished.....Unfinished.....Raw.....Valued at cost or market?.....Is all salable?.....

LAND. Describe briefly.....Assessed value.....Market value.....

BUILDINGS. Cost $.....Age.....Depreciation.....

MACHINERY AND FIXTURES. Cost $.....Depreciation.....Condition.....

OTHER ASSETS.

Are any of assets unavailable for paying debts?.....Losses.....

INSURANCE. State what kind and amount.....

NOTES PAYABLE. To own banks.....Through brokers.....Otherwise.....

ACCOUNTS PAYABLE. Terms of purchase?..... Do you discount and anticipate?.....

DEPOSITS. Time or demand?.....From whom?..... ....Interest.....

BONDED DEBT AND MORTGAGES. Due?.....Rate.....On what assets a lien?.....

ACCRUED LIABILITIES. Itemize.....

CAPITAL. Preferred Authorized $.....Issued $.....Dividends.....Common Authorised $.....Issued $.....Dividends $.....

RESERVES. Itemize.....

NET SALES.

Last fiscal year	.....
Cost of sales	.....
Gross profit	
Interest, taxes, depreciation, etc.	.....
Dividends paid	.....
Surplus for year	

Have the books been audited by a Certified Public Accountant?....If so, give name of firm and date of audit.....

CORPORATE NAME.....

By.....
(State officer's title)

Date signed.....

Office address.....Nature of Business.....

Location of plants and branch offices.....

have not had the nerve to take this advice except to a limited extent. There have, however, been some "horrible examples" in which the calling in of auditors previously to making loans would have saved the banks millions of dollars.

It will be noticed that the bankers wish to read the statements just reproduced along the lines advocated on page 367 hereof; that is, they want to know about the assets in the order of their availability, and want to ascertain the liabilities in the order in which they must be discharged.

An Excellent Form.—A more recent form, prepared by Abraham E. Van Doren, vice-president of the Irving National Bank of New York, one of the largest national banks in the United States, is shown in detail on pages 382 to 385 inclusive. This form follows the rules laid down by the Federal Reserve Board and is the best one to which the author's attention has been drawn.

A desirable innovation is found in this form in the provision for a notary's certificate. Together with other features, which are designed to put the borrower squarely on record as to his actual assets and liabilities, this form is expected to furnish legal evidence sufficient to convict the borrower of fraud if it is shown subsequently that any material discrepancy exists between the statement and the facts.

New York Stock Exchange Requirements for Listing Securities

Under the heading of "Financial Statements" the following information is required:

Financial statements: (1) earnings for preceding five years, if available; (2) income account of recent date for at least one year, if available; (3) balance sheet of same date; (4) similar accountings for predecessor, constituent, subsidiary, owned or controlled companies; (5) corporations consolidated within one year previous to date of application, income account and balance sheet of all companies merged and balance sheet of applying corporation; (6) if in hands of receiver within one year previous to date of application, (a) income account and balance sheet of receiver at

CORPORATE FORM **CREDIT FILE No.**

NAME (Corporate Style Under Charter)

LOCATION

To IRVING NATIONAL BANK, New York

The following true and accurate statement of the financial condition of this Corporation on the day of 19 is made and furnished by the undersigned for the purpose of procuring Credit from time to time with you for our negotiable paper or otherwise.

BALANCE SHEET

(Federal Reserve Bank Requirement)

ASSETS	ITEMIZE	TOTAL
QUICK ASSETS		
Cash on Hand		
Cash in Banks (Schedule 1)		
Notes Receivable (Schedule 2)		
Accounts Receivable (Schedule 2)		
Inventory (Schedule 3)		
INVESTED ASSETS		
Land (Schedule 8)		
Buildings (Schedule 8)		
Machinery, Fixtures, Equipment (less Reserve $		
Investments (Schedule 4)		
Patents and Goodwill		
DEFERRED CHARGES		
Unexpired Insurance Premiums		
Prepaid Interest, etc.		
	TOTAL ASSETS	

LIABILITIES	ITEMIZE	TOTAL
SHORT TERM INDEBTEDNESS (Due Within One Year)		
Notes given for Merchandise		
Notes given for Borrowed Money (Schedule 1)		
Accounts Payable (Schedule 6)		
Liability for Acceptances under Letters of Credit (Schedule 1)		
Deposits of Money (Schedule 5)		
Dividends Unpaid, Accrued and other Liabilities		
LONG TERM INDEBTEDNESS (Due After One Year)		
Notes given for Borrowed Money (Schedule 1)		
Deposits of Money (Schedule 5)		
Bonded Dept. (Schedule 7)		
Mortgages on Real Estate or Chattels (Schedule 8)		
Other Liabilities due after one year		
Special Reserve (Not Deducted from Assets)		
	TOTAL LIABILITIES	
CAPITAL		
Preferred Stock Issued		
Common Stock Issued		
Surplus (As per Surplus Account)		
Deficit (As Per Surplus Account)		
	TOTAL	

Amount of Forward Purchases not included in either Assets or Liabilities

FIRM SIGNATURE

Sc 1-19

BY

CONTINGENT LIABILITY (Federal Reserve Bank Requirement)

FORM	AMOUNT	FORM	AMOUNT
Upon Customers Notes Discounted, Sold, or Otherwise Transferred		For Accommodation Endorsements or Guarantees Under Conditional Sale Contracts. or Purchase Arrangements	
Upon Drafts Discounted or Sold		Under Agreement for Stock or other Subscription	
Upon Bonds or other Obligations of Subsidiary Cos.		Under Pending Law Suits	
Upon Leases			
Upon Unused Letters of Credit Outstanding		TOTAL	

Is this Company a guarantor or endorser of any liabilities of any individual, firm, or corporation, or is it liable under any contracts bonds or profit sharing arrangements or any other aggreements, or are there any law-suits pending except as set forth above?

PROFIT AND LOSS ACCOUNT FROM 19 to 19

Inventory at beginning of Period (19)		Inventory at End of Period (19)	
Purchases-Net (Less Returns, etc., $)		Sales-Net (Less Returns, etc., $)	
Operating Expenses		Commissions Earned	
General Expenses		Discounts Earned	
Bad Debts Charged Off		Income from Investments, etc.	
Depreciation Charged Off		Losses of Previous Periods Recovered	
Reserves Created			
NET PROFIT		NET LOSS	
TOTAL		TOTAL	

SURPLUS ACCOUNT FISCAL PERIOD ENDING 19

Deficit at beginning of Period		Surplus at beginning of Period	
Dividends Paid Pref. $ Com. $		Credits to Surplus during Period	
Special Reserves Created			
Other Charges to Surplus			
Net. Loss (from P&L Acct.)		Net Profit (from P&L Acct.)	
Surplus as per statement		Deficit as per Strtement	
TOTAL		TOTAL	

INSURANCE

FORM	ASSETS COVERED	BENEFICIARY	ASSIGNEE	AMOUNT
Fire	Merchandise			
Fire	Buildings and Equipment			
Credit	Accounts and Bills Receivable			
Life	Endorsers or Executives			
Other Kinds				
			TOTAL	

SCHED. 1 CASH, NOTES GIVEN FOR BORROWED MONEY, AND LIABILITY FOR ACCEPTANCES UNDER LETTERS OF CREDIT

DEPOSITORY BANKS	Cash Balance at Date of Statement	Line of Credit Received from each	Amount Owing on Date of Statement: Notes	Amount Owing on Date of Statement: Acceptances	Security, Endorsements or Guarantees given
OTHER SOURCES OF CREDIT (Note Broker)					
Total as per Balance Sheet					

If your Branches borrow locally, state amount owing not included in bills payable (Schedule 1) $

SCHEDULE 2 NOTES AND ACCOUNTS RECEIVABLE

DESCRIPTION	Notes Receivable	Accounts Receivable
DUE FROM TRADE DEBTORS (Not including any item in "Other Debtors")		
For Merchandise Sold upon Regular Terms		
Accounts Receivable over Six Months Old or Past Due Notes		
TOTAL TRADE		
DUE FROM OTHER DEBTORS, (Inter-Company, Controlled Companies, etc.)		
Officers, Directors, Stockholders or Employees		
Own Selling Houses or Branches		
Subsidiary Corporations		
Allied, Controlled or Affiliated Interests		
For Capital Stock Sold		
For Merchandise on Consignment		
Cash Advances (Security Therefor if Any $		
Commissions Due and Payable		
Other Accounts and Notes Receivable		
TOTAL OTHER DEBTORS		
Less Reserves Created to Cover Possible Discount and Losses		
TOTAL AS PER BALANCE SHEET		
What Amount of Accounts or Notes receivable has been Discounted or Pledged?		

SCHEDULE 3 - INVENTORY (Should be taken at cost or market price - whichever is lower)

TAKEN _____ 19 _____ By _____

DESCRIPTION	AMOUNT
Finished Merchandise (How Priced*)	
Merchandise in process (" ")	
Raw Material (" ")	
Supplies, etc	
Other Items Included in Inventory	
TOTAL	
Less Reserve and Allowance for Merchandise of Obsolete Pattern or Otherwise not Readily Saleable	
TOTAL AS PER BALANCE SHEET	
What Amount is held by you under Trust Receipt?	
What Amount do you hold on Consignment (Included in Inventory?)	
What Amount has been Pledged as Collateral for Loans or Advances?	
What Amount has been priced at more than Cost?	
What is Amount of Unfilled Orders on Hand?	

SCHEDULE 4 - INVESTMENTS

DESCRIPTION OF SECURITY	No. of Bonds or Shares Held	AMOUNT PLEDGED	PAR VALUE	BOOK VALUE	Income or Dividend Rec'd Last Year
TOTAL AS PER BALANCE SHEET					

SCHEDULE 5 - DEPOSITS OF MONEY

NAME OF DEPOSITOR	AMOUNT	MATURITY	Rate of Interest	Security, Endorsement or Guarantee
TOTAL AS PER BALANCE SHEET				

SCHEDULE 6 - ACCOUNTS PAYABLE

DESCRIPTION	AMOUNT
For Merchandise Purchased upon Regular Terms, Not Due	
" " " " " " Past Due	
Due Officers, Directors, Stockholders or Employees	
Other Accounts Payable	
TOTAL AS PER BALANCE SHEET	

SCHEDULE 7 - BONDED DEBT (Federal Reserve Bank Requirement)*

DESCRIPTION	Amount Authorized	Issued and Outstanding	Amount Pledged as Collateral to Loans	Maturity	Rate of Interest	TRUSTEE OR MORTGAGE

*Upon what Assets are the above described Bonds a lien ?

Provision for Retirement

SCHEDULE 8 - REAL ESTATE (Please give particulars of each parcel)

DESCRIPTION	LOCATION	OWNER OF RECORD	VALUE*	MORTGAGES	EQUITY
		TOTAL AS PER BALANCE SHEET			

VERIFICATION If your books have been audited by a Certified Public Accountant state his name and date of Audit

CHARACTER OF BUSINESS (Federal Reserve Bank Requirement)

Describe briefly the character of Business you conduct

PURPOSE OF BORROWING (Federal Reserve Bank Requirement)

State whether the proceeds of Loans applied for or to be applied for are to be used

(A) For Investment in Securities, Lands, Plants, Buildings, Machinery, Improvements or Equipment,

(B) In the Production, Manufacture and Distribution of Commodities of Agriculture, Industry or Commerce

MAXIMUM AND MINIMUM LIABILITIES

When did your Liabilities reach their Maximum last year 19 . Amount $

" " " " " = Minimum " " 19 . " $

Have any of your Accounts been Assigned or Assets Pledged or is there any Lien upon them except as noted above ?

N.B. It is most essential that each question be fully answered

AFFIDAVIT

STATE OF } s.s.
COUNTY OF } s.s. _____ being duly sworn deposes and says; that he is _____ of _____

the Corporation whose financial statement appears above, that he signed the said statement after reading it and the accompanying schedules, and that the same is in all respects a full, true and accurate statement of the financial condition of said Corporation.

on the _____ day of _____ 19 Sworn to before me this _____ day of _____ 19

_____

time of discharge, and (b) balance sheet of company at close of receivership.

and under "Agreements" appear the following additional requirements:

To publish at least once in each year and submit to the stockholders, at least fifteen days in advance of the annual meeting of the corporation, a statement of its physical and financial condition, an income account covering the previous fiscal year, and a balance sheet showing assets and liabilities at the end of the year; also annually an income account and balance sheet of all constituent, subsidiary, owned or controlled companies; or a consolidated income account and a consolidated balance sheet.

Federal Reserve Board Requirements

The Federal Reserve Board, whose regulations should in time become the controlling authority with respect to financial statements, has issued model forms. These are for corporations, partnerships or individual owners, and individuals, respectively. The forms (revised in July, 1921, by the Federal Reserve Bank of Richmond) are reproduced on pages 387 to 392.

These forms will repay careful study. Notice especially the manner in which the segregation of current assets from other assets is made; also the manner of arrangement of the liability side of the balance sheet. Note also the segregation of notes receivable, acceptances, and accounts receivable into two classes, namely: those "not yet due" and those "past due," as well as the method of deducting reserves for those that are doubtful or bad. The method of stating the surplus of corporations and the net worth of partnerships is such that the important factors affecting those accounts are clearly set forth. On the reverse side of the statements are detailed questionnaires. Space is given on each form to the important matter of contingent liabilities. In arriving at net income for the period, depreciation is deducted as an expense. Stocks are not included in current assets, yet if marketable they are more current than is the inventory of merchandise. The prepaid items which belong in current

FEDERAL RESERVE BANK OF RICHMOND

FORM CR 9

TO BE USED BY CORPORATION

FINANCIAL STATEMENT OF MANUFACTURING OR MERCANTILE BUSINESS

DATE OF STATEMENT _____ 19____

NAME OF CORPORATION _____

LOCATION OF BUSINESS _____

CHARACTER OF BUSINESS _____

ASSETS		LIABILITIES	
1. Cash—On Hand and in Bank	$	18. Notes Payable:	
2. Notes Receivable and Acceptances—Due from Customers (not discounted or sold):		(a) For Merchandise Purchased	$
(a) Not yet Due		(b) To Banks for Money Borrowed	
(b) Past Due $		(c) Others	
Less Reserve for Doubtful $		19. Accounts Payable:	
3. Accounts Receivable—Due from Customers (for goods sold to them):		(a) For Merchandise Purchased	
(a) Not yet Due		(b) Others	
(b) Past Due $		20. Acceptances:	
Less Reserve for Bad and Doubtful $		(a) Trade Acceptances—Payable	
4. Due for Merchandise Sold or Placed on Consignment		(b) Bankers' Acceptances—For our Account	
(Inventory Value, $)		21. Accounts and Notes Due to Officers, Stockholders and Employees	
5. Inventory—Merchandise:		22. Deposits of Money with Us	
(a) Raw Material $		23. Due to Subsidiary, Controlled or Allied Concerns	
(b) In Process of Manufacture $		24. Liability for Notes and Accounts (shown in Assets) which have been Sold, Assigned, Pledged or Discounted	
(c) Finished Goods $		25. Reserve for Federal Taxes	
(Market Value of Entire Inventory, $)		26. Accrued Expenses—Other Taxes, Interest, Salaries, Wages and Other Expense	
6. Liberty Bonds and U. S. Certificates of Indebtedness (Equity Owned)		27. Dividends Unpaid—Including Cumulative and Preferred Dividends Accrued	
(Present Market Price $)		28. Other Current Liabilities (Itemize):	
7. Other Quick Assets (Itemize):			
(Present Market Value of All Other Quick Assets, $)			
TOTAL CURRENT ASSETS		TOTAL CURRENT LIABILITIES	
8. Stocks, Bonds and Other Investments		29. Mortgages on Plant or Real Estate (when due)	
(Present Market Price $)		30. Bonded Debt (when due)	
9. Due from Subsidiary, Controlled or Allied Concerns		31. Chattel Mortgages	
10. Accounts and Notes due from Officers, Stockholders and Employees		32. Reserves—Depreciation or Other Reserves (Itemize):	
11. Land and Buildings (used for Plant)			
12. Other Real Estate			
13. Machinery and Equipment		33. Other Liabilities (Itemize):	
14. Furniture and Fixtures			
15. Patents, Trade Marks, Royalties, Leases, Good Will, etc			
16. Deferred Charges:		TOTAL	
(a) Unexpired Insurance Premiums		34. Capital Stock Outstanding—Preferred	
(b) Prepaid Interest		35. Capital Stock Outstanding—Common	
(c) Prepaid Expenses		36. Surplus and Undivided Profits (per statement below)	
17. Other Assets (Itemize):			
(Present Market Value of All "Other Assets," $)			
TOTAL	$	TOTAL	$

CONDENSED PROFIT AND LOSS ACCOUNT FOR PERIOD FROM _____, 19____, TO _____, 19____

Inventory at Beginning of Period	$	Sales—Net (less Returns, Allowances, etc)	$
Add Purchases—Net (less Returns, Allowances, etc)		Discounts Earned	
TOTAL		Interest Earned	
Less Inventory at End of Period		Income from Investments	
COST OF GOODS SOLD		Losses of Previous Periods Recovered	
Operating and Selling Expenses (Including Discounts Allowed)		Income from Other Sources (Itemize):	
General Expenses (Including Interest)			
Bad Debts Charged off			
Depreciation Charged off		Net Loss for Period	
Reserved for Federal Taxes (for Current Period)			
Other Charges to Profit and Loss			
Net Profit for Period			
TOTAL	$	TOTAL	$

SURPLUS AND UNDIVIDED PROFITS—FOR ABOVE PERIOD

Dividends Declared—Preferred	$	Surplus and Undivided Profits at Beginning of Period	$
Dividends Declared—Common		Special Credits to Surplus during Period	
Special Reserves Created out of Surplus			
Other Charges to Surplus (Special)		Net Profit for Period (from Profit and Loss Account above)	
Net Loss for Period (from Profit and Loss Account above)			
Surplus and Undivided Profits at End of Period			
TOTAL	$	TOTAL	$

(OVER)

CONTINGENT LIABILITIES AT DATE OF THIS STATEMENT

Customers' Notes and Acceptances Discounted, Sold, Assigned or Pledged	$
Customers' Accounts Sold, Assigned or Pledged	
Liability under Purchase Contracts or Agreements as to Purchases (of whatever character)	
Liability for Bonds or Unfinished Sale Contracts	
Liability as Endorser or Guarantor for Others on Notes, Contracts or Other Obligations	
Liability upon Notes, Bonds, Contracts or Other Obligations of Subsidiary Companies	
Liability for Leases	
TOTAL	$

Has this Corporation any Contingent Liability of any description except as set forth above? _____

If so, describe _____ and state amount $ _____

NOTE.—IT IS NECESSARY THAT ALL OF THE FOLLOWING QUESTIONS RELATING TO THE STATEMENT BE ANSWERED CAREFULLY

1. (a) Are any Notes, Acceptances or Accounts Receivable, which have been discounted, sold, assigned or pledged, shown among your Assets? _____
(b If so, is the amount of money or advances received by you against them shown in Liabilities (Item 24)? _____ (c) If none of such Notes, Acceptances or Accounts Receivable are shown among Assets, are they shown above in Contingent Liabilities? _____

2. (a) Upon what terms do you sell? _____ days. (b) Do any of your Accounts Receivable—"Not Yet Due" (Item 3-a) extend over a longer period? _____ (c) What amount? $ _____ (d) What is the average age of your Accounts Receivable—"Past Due" (Item 3-b)? _____ months. (e) What amount do you consider good? $ _____

3. (a) Is the amount of your Consignment Accounts or Merchandise on Consignment (Item 4) shown at your Inventory Value or your Selling Price? _____ (b) If at your selling price, what is the cost or Inventory Value? $ _____

4. (a) When was the Merchandise Inventory (Items 5-a, -b, and -c) taken? _____ (b) Was it valued at Cost to you or Market Price (replacement value) at date of Inventory? _____ (c) Which was lower, Cost or Market? _____
(d) What do you estimate to be the price of replacement (market cost to you) of your entire Inventory at date of this statement? $ _____
(e) Was the total amount of Inventory (as shown in Assets) actually owned by you; that is, either paid for or the liability for it set up in Current Liabilities? _____ (f) Amount of Insurance carried on Inventory? $ _____

5. (a) What is the present market value of Stocks, Bonds and Other Investments (Item 8)? $ _____ (b) Are any of such Investments represented by obligations of Subsidiary, Controlled or Allied Concerns? _____ (c) What amount? $ _____

6. (a) How much of the amount due from Subsidiary, Controlled or Allied Concerns (Item 9) was for merchandise? $ _____ (b) How much for advances, loans or deposits? $ _____ (c) Give names of such concerns _____

7. (a) How did the Accounts and Notes due by Officers, Stockholders and Employees (Item 10) arise? _____
(b) Are any of them past due? _____ (c) How old are they? _____

8. (a) What is the Assessed Value of Land and Buildings—Used for Plant (Item 11)? $ _____ (b) Of Other Real Estate (Item 12)? $ _____
(c) Has a fair and reasonable amount been charged off for depreciation on Machinery and Equipment (Item 13) and Furniture and Fixtures (Item 14)? _____ (d) Amount of Insurance carried on Plant Buildings? $ _____ (e) On Other Real Estate? $ _____
(f) On Machinery and Equipment? $ _____ (g) On Furniture and Fixtures? $ _____

9. (a) Name Banks from which you are borrowing and amount borrowed from each (Item 18-b) _____
(b) Amount of your Notes Payable secured by Collateral? $ _____ (c) Describe Collateral giving amount of each kind _____

10. (a) Are all Notes and Accounts Payable for Merchandise Purchased (Items 18-a and 19-a) shown in Liabilities, whether or not goods have been received? _____ (b) What amount is not shown? $ _____ (c) Notes and Accounts Payable—Others (Items 18-c and 19-b) represent what? _____ (d) Are any Notes or Accounts Payable past due? _____
(e) If so, what amount? $ _____

11. (a) If no provision has been made for Federal Taxes (Item 25), state estimated amount $ _____

12. (a) On what Assets is your Bonded Debt (Item 30) a lien? _____ (b) Rate of Interest? _____
(c) Is the amount of Accrued Interest on Mortgages and Bonded Debt included in Item 26? _____ (d) If not, where? _____
(e) What provision is made for retirement of Mortgages (Item 29) and Bonded Debt (Item 30)? _____

TO:

_____ (Bank)
_____ (Location)

The name of the member bank to which this statement is furnished, to be stamped or written on these lines.

The foregoing financial statement and other representations are made by the undersigned corporation for the purpose of procuring credit, obtaining loans and discounting paper with you from time to time. If any unfavorable change in our financial condition occurs, the undersigned agrees to immediately notify you, and, in the absence of such notice, you may continue to rely upon this statement as being substantially true and accurate and continuing in force and effect.

The foregoing financial statement and all details pertaining thereto have been carefully gone over by the undersigned, and, as an officer of the corporation duly authorized to contract liabilities, I hereby solemnly declare and certify that they set forth a true and accurate statement of our financial condition.

Name of Corporation _____

Date signed _____, 19____ By _____
(Officer's title must be given)

(Statements submitted to the Federal Reserve Bank of Richmond must be signed originals or certified copies. If copies are submitted, the following certificate must be officially signed by member bank.)

We hereby certify that the foregoing is a true and correct copy of a signed financial statement of the above mentioned corporation now on file in this bank.

Name of Member Bank _____

Official Signature _____
(Title)

FEDERAL RESERVE BANK OF RICHMOND

FORM CR 10

To Be Used by FIRM PARTNERSHIP OR INDIVIDUAL OWNER

FINANCIAL STATEMENT OF MANUFACTURING OR MERCANTILE BUSINESS

DATE OF STATEMENT _____ 19____

NAME OF FIRM OR INDIVIDUAL _____

LOCATION OF BUSINESS _____

CHARACTER OF BUSINESS _____

ASSETS		LIABILITIES	
1. Cash—On Hand and in Bank	$	18. Notes Payable:	
2. Notes Receivable and Acceptances—Due from Customers (not discounted or sold):		(a) For Merchandise Purchased	$
(a) Not yet Due		(b) To Banks for Money Borrowed	
(b) Past Due $		(c) Others	
Less Reserve for Doubtful $		19. Accounts Payable:	
3. Accounts Receivable—Due from Customers (for goods sold to them):		(a) For Merchandise Purchased	
(a) Not yet Due		(b) Others	
(b) Past Due $		20. Acceptances:	
Less Reserve for Bad and Doubtful $		(a) Trade Acceptances—Payable	
4. Due for Merchandise Sold or Placed on Consignment		(b) Bankers' Acceptances—For our (my) Account	
(Inventory Value, $)		21. Accounts and Notes Due to Partners and Employees	
5. Inventory—Merchandise:		22. Deposits of Money with this Firm or Individual	
(a) Raw Material $		23. Due to Subsidiary, Controlled or Allied Concerns	
(b) In Process of Manufacture $		24. Liability for Notes and Accounts (shown in Assets) which have been Sold, Assigned, Pledged or Discounted	
(c) Finished Goods $		25. Reserve for Federal Taxes	
(Market Value of Entire Inventory, $)		26. Accrued Expenses—Other Taxes, Interest, Salaries, Wages and Other Expense	
6. Liberty Bonds and U. S. Certificates of Indebtedness (Equity Owned)		27. Other Current Liabilities (Itemize):	
(Present Market Price $)			
7. Other Quick Assets (Itemize):			
(Present Market Value of All Other Quick Assets, $)		TOTAL CURRENT LIABILITIES	
TOTAL CURRENT ASSETS			
8. Stocks, Bonds and Other Investments		28. Mortgages or Liens on Plant or other Real Estate (when due)	
(Present Market Price $)		29. Chattel Mortgages	
9. Due from Subsidiary, Controlled or Allied Concerns		30. Reserves—Depreciation or Other Reserves (Itemize):	
10. Accounts and Notes due from partners and Employees			
11. Land and Buildings (used for Plant)			
12. Other Real Estate			
13. Machinery and Equipment			
14. Furniture and Fixtures		31. Other Liabilities (Itemize):	
15. Patents, Trade Marks, Royalties, Leases, Good Will, etc			
16. Deferred Charges:			
(a) Unexpired Insurance Premiums		TOTAL	
(b) Prepaid Interest		32. Net Worth (per statement below)	
(c) Prepaid Expenses			
17. Other Assets (Itemize):			
(Present Market Value of All "Other Assets," $)			
TOTAL	$	TOTAL	$

CONDENSED PROFIT AND LOSS ACCOUNT FOR PERIOD FROM _____, 19____, TO _____, 19____

Inventory at Beginning of Period	$	Sales—Net (less Returns, Allowances, etc)	$
Add Purchases—Net (less Returns, Allowances, etc)		Discounts Earned	
TOTAL		Interest Earned	
Less Inventory at End of Period		Income from Investments	
COST OF GOODS SOLD		Losses of Previous Periods Recovered	
Operating and Selling Expenses (Including Discounts Allowed)		Income from Other Sources (Itemize):	
General Expenses (Including Interest)			
Bad Debts Charged off			
Depreciation Charged off		Net Loss for Period	
Reserved for Federal Taxes (for Current Period)			
Other Charges to Profit and Loss			
Net Profit for Period			
TOTAL	$	TOTAL	$

STATEMENT OF NET WORTH—FOR ABOVE PERIOD

Withdrawals by Partners or Individual Owner (other than Salaries, which should be included in Expenses in Profit and Loss Account above)	$	Net Worth at Beginning of Period	$
Special Withdrawals or Reserves created out of Net Worth		Special Deposits or Increases in Net Worth not Earned by the Business	
Net Loss for Period (from Profit and Loss Account above)		Net Profit for Period (from Profit and Loss Account above)	
Net Worth at End of Period			
TOTAL	$	TOTAL	$

(OVER)

CONTINGENT LIABILITIES AT DATE OF THIS STATEMENT

	$
Customers' Notes and Acceptances Discounted, Sold, Assigned or Pledged	
Customers' Accounts Sold, Assigned or Pledged	
Liability under Purchase Contracts or Agreements as to Purchases (of whatever character)	
Liability for Bonds or Unfinished Sale Contracts	
Liability as Endorser or Guarantor for Others on Notes, Contracts or Other Obligations	
Liability upon Notes, Bonds, Contracts or Other Obligations of Subsidiary Companies	
Liability for Leases	
TOTAL	$

Have you any Contingent Liability of any description except as set forth above? _____

If so, describe _____ and state amount $ _____

NOTE.—IT IS NECESSARY THAT ALL OF THE FOLLOWING QUESTIONS RELATING TO THE STATEMENT BE ANSWERED CAREFULLY

1. (a) Are any Notes, Acceptances or Accounts Receivable, which have been discounted, sold, assigned or pledged, shown among your Assets? _____ (b) If so, is the amount of money or advances received by you against them shown in Liabilities (Item 24)? _____. (c) If none of such Notes, Acceptances or Accounts Receivable are shown among Assets, are they shown above in Contingent Liabilities? _____.

2. (a) Upon what terms do you sell? _____ days. (b) Do any of your Accounts Receivable—"Not Yet Due" (Item 3-a) extend over a longer period? _____ (c) What amount? $_____. (d) What is the average age of your Accounts Receivable—"Past Due" (Item 3-b)? _____ months. (e) What amount do you consider good? $_____.

3. (a) Is the amount of your Consignment Accounts or Merchandise on Consignment (Item 4) shown at your Inventory Value or your Selling Price? _____. (b) If at your selling price, what is the cost or Inventory Value? $_____.

4. (a) When was the Merchandise Inventory (Items 5-a, -b, and -c) taken? _____. (b) Was it valued at Cost to you or Market Price (replacement value) at date of Inventory? _____. (c) Which was lower, Cost or Market? _____
(d) What do you estimate to be the price of replacement (market cost to you) of your entire Inventory at date of this statement? $_____
(e) Was the total amount of Inventory (as shown in Assets) actually owned by you; that is, either paid for or the liability for it set up in Current Liabilities? _____. (f) Amount of Insurance carried on Inventory? $_____.

5. (a) What is the present market value of Stocks, Bonds and Other Investments (Item 8)? $_____. (b) Are any of such Investments represented by obligations of Subsidiary, Controlled or Allied Concerns? _____. (c) What amount? $_____.

6. (a) How much of the amount due from Subsidiary, Controlled or Allied Concerns (Item 9) was for merchandise? $_____. (b) How much for advances, loans or deposits? $_____. (c) Give names of such concerns _____

7. (a) How did the Accounts and Notes due by Partners and Employees (Item 10) arise? _____
(b) Are any of them past due? _____. (c) How old are they? _____.

8. (a) What is the Assessed Value of Land and Buildings—Used for Plant (Item 11)? $_____. (b) Of Other Real Estate (Item 12)? $_____
(c) Has a fair and reasonable amount been charged off for depreciation on Machinery and Equipment (Item 13) and Furniture and Fixtures (Item 14)? _____. (d) Amount of Insurance carried on Plant Buildings? $_____. (e) On Other Real Estate? $_____
(f) On Machinery and Equipment? $_____. (g) On Furniture and Fixtures? $_____.

9. (a) Name Banks from which you are borrowing and amount borrowed from each (Item 18-b) _____

(b) Amount of your Notes Payable secured by Collateral? $_____. (c) Describe Collateral giving amount of each kind _____

10. (a) Are all Notes and Accounts Payable for Merchandise Purchased (Items 18-a and 19-a) shown in Liabilities, whether or not goods have been received? _____. (b) What amount is not shown? $_____. (c) Notes and Accounts Payable—Others (Items 18-c and 19-b) represent what? _____. (d) Are any Notes or Accounts Payable past due? _____
(e) If so, what amount? $_____.

11. (a) If no provision has been made for Federal Taxes (Item 25), state estimated amount $_____.

12. (a) Is there any Mortgage, Lien or Bonded Debt against any of your Assets, except as shown in Items 28 and 29? _____
(b) If so, describe _____
(c) Where is the Liability shown in the Statement? _____. (d) What is the Rate of Interest on Mortgages (Item 28)? _____. (e) Is the amount of Accrued Interest on Mortgages included in Item 26? _____. (f) If not, where? _____. (g) What provision (if any) is being made for the retirement of Mortgages? _____

TO:

_____ (Bank)

_____ (Location)

The name of the member bank to which this statement is furnished, to be stamped or written on these lines.

The foregoing financial statement and other representations are made by the undersigned for the purpose of procuring credit, obtaining loans and discounting paper with you from time to time. If any unfavorable change in our (my) financial condition occurs, the undersigned agrees to immediately notify you, and, in the absence of such notice, you may continue to rely upon this statement as being substantially true and accurate and continuing in force and effect.

The foregoing financial statement and all details pertaining thereto have been carefully gone over by the undersigned, and I hereby solemnly declare and certify that they set forth a true and accurate statement of our (my) financial condition.

Name of Firm or Individual _____

Date signed _____, 19____. By _____
(Member of Firm or Owner)

(Statements submitted to the Federal Reserve Bank of Richmond must be signed originals or certified copies. If copies are submitted, the following certificate must be officially signed by member bank.)

We hereby certify that the foregoing is a true and correct copy of a signed financial statement of the above mentioned firm or individual now on file in this bank.

Name of Member Bank _____

Official Signature _____
(Title)

FEDERAL RESERVE BANK OF RICHMOND

FORM CR 11

TO BE USED BY INDIVIDUAL

FINANCIAL STATEMENT OF FARMER OR OTHER INDIVIDUAL

DATE OF STATEMENT _____ 19____

NAME _____

ADDRESS _____

BUSINESS _____

ASSETS		LIABILITIES	
1. Cash—On Hand and in Bank	$	21. Accounts Owed by Me	$
2. Accounts Due Me—Good		22. Notes Owed by Me—Without Security	
3. Loans Due Me—Unsecured—Good		23. Notes Owed by Me—With Security other than Real Estate or Chattel Mortgages	
4. Loans Due Me—Secured—(except Mortgage Loans see Item 10 below)—Due within Six Months			
5. Farm Products on Hand—For Market			
6. Farm Products on Hand—For Own Use		24. Mortgages Owed by Me—On Farm Property (Date Due _____)	
7. Live Stock on Hand—For Market			
8. Other Merchandise on Hand for Sale (Itemise):		25. Mortgages Owed by Me—On Town or City Real Estate (Date Due _____)	
9. Liberty Bonds and Other United States Securities (Present Market Price $_____)		26. Notes Owed by Me with Chattel Mortgages as Security (Date Due _____)	
10. Mortgage Loans Due Me		27. U. S. Government Taxes—Unpaid	
11. Loans Due Me—Otherwise Secured—Due after Six Months (see Item 4 above)		28. State County or Other Taxes—Unpaid	
12. Live Stock on Hand—For Own Use (see Item 7 above)		29. Any Other Indebtedness (Itemise):	
13. Farm Land—Cultivated (_____ Number acres)			
14. Farm Land—Not Cultivated (_____ Number acres)			
15. Buildings and Other Improvements Thereon			
16. Town or City Real Estate			
17. Buildings and Other Improvements Thereon			
18. Farm Implements and Machinery			
19. Investments in Stocks and Bonds (at Present Market)			
20. Any Other Property or Investments (Itemise):		TOTAL LIABILITIES	$
		NET WORTH	
TOTAL	$	TOTAL	$

CONTINGENT LIABILITIES AT DATE OF THIS STATEMENT

Liability as Endorser on Notes of Other Persons, Firms and Corporations	$
Liability as Guarantor for Accounts or Notes of Other Persons, Firms or Corporations	
Liability on Notes Exchanged with Others	
Liability as Surety or Bondsman for Other Persons, Firms or Corporations	
Liability for Leases	
Liability for Judgments or Suits Pending against Me	
TOTAL	$

Have you any Contingent Liability of any description except as set forth above? _____

If so, describe _____ and state amount $ _____

(OVER)

NOTE—IMPORTANT—PLEASE ANSWER CAREFULLY AND FULLY THE FOLLOWING QUESTIONS:

1. (a) Are you a Partner in any Firm?_____

(b) Is there any person interested in your business as a Partner?_____

2. (a) Are any of the Accounts and Loans due you (Items 2, 3, 4 and 10) past due?_____

(b) If so, describe and give amounts_____

3. (a) Are your Inventories of Farm Products, Live Stock and other Merchandise (Items 5, 6, 7 and 8) valued at present Market Price?_____

(b) If not, how valued?_____

(c) What do you estimate you would have to pay for the same today, namely: Farm Products (Items 5 and 6)? $_____ Live Stock (Item 7)? $_____ Other Merchandise (Item 8)? $_____

(d) What Insurance do you carry on Farm Products (Items 5 and 6)? $_____ On Live Stock (Item 7)? $_____ On other Merchandise (Item 8)? $_____

4. (a) What amount of Mortgage Loans due you (Item 10) will fall due within six months? $_____

5. (a) Is your Farm Property (Items 13, 14 and 15) in your own name?_____

(b) If not, in whose name?_____

6. (a) Is your Town or City Property (Items 16 and 17) in your own name?_____

(b) If not, in whose name?_____

7. (a) Is your property listed at assessed valuation?_____

(b) If not, how valued?_____

(c) What is the assessed valuation? $_____

8. (a) What Insurance do you carry on Farm Buildings (Item 15)? $_____ On Town or City Buildings (Item 17)? $_____ On Live Stock for own use (Item 12)? $_____

9. (a) Are any of your Assets (except Farm Property or other Real Estate) pledged, assigned or hypothecated in any way?_____

10. (a) Do you carry Life Insurance?_____

(b) What amount? $_____

(c) Who is Beneficiary?_____

11. (a) Are any of the Accounts, Notes or Mortgages owed by you (Items 21 to 26) past due?_____

(b) If so, state amounts and reasons_____

12. (a) What amount of U. S. Government Taxes did you pay last year? $_____

TO:

_____ (Bank)

_____ (Location)

The name of the member bank to which this statement is furnished, to be stamped or written on these lines.

The foregoing financial statement and other representations are made by the undersigned for the purpose of procuring credit, obtaining loans and discounting paper with you from time to time. If any unfavorable change in my financial condition occurs, the undersigned agrees to immediately notify you, and, in the absence of such notice, you may continue to rely upon this statement as being substantially true and accurate and continuing in force and effect.

The foregoing financial statement and all details pertaining thereto have been carefully gone over by the undersigned, and I hereby solemnly declare and certify that they set forth a true and accurate statement of my financial condition.

Date signed_____, 19____. Signed_____

(Name of Individual)

(Statements submitted to the Federal Reserve Bank of Richmond must be signed originals or certified copies. If copies are submitted, the following certificate must be officially signed by member bank.)

We hereby certify that the foregoing is a true and correct copy of a signed financial statement of the above mentioned individual now on file in this bank.

Name of Member Bank_____

Official Signature_____

(Title)

assets follow the old form. The author believes that within a short time good accounting practice will sanction the inclusion in current assets of all *current* prepayments. Deferred charges which are not mere prepayments of current expenses should appear as a separate group following fixed assets.

The board suggests that the credit files of member banks should include information concerning the following matters:

1. The nature of the business or occupation of the borrower.
2. If an individual, information as to his indebtedness and his financial responsibility.
3. If a firm or corporation, a balance sheet showing quick assets, slow assets, permanent or fixed assets, current liabilities and accounts, short-term loans, long-term loans, capital and surplus.
4. All contingent liabilities, such as indorsements, guarantees, etc.
5. Particulars respecting any mortgage debt and whether there is any lien on current assets.
6. Such other information as may be necessary to determine whether the borrower is entitled to credit in the form of short-term loans.

The credit files, it is expected, will be generally adopted, although it is to be noted that the regulations of the board do not absolutely require their adoption.

Statements Requested by Credit Managers

Scientific credit granting requires the employment of a high degree of ability. This is possessed by the modern credit manager, or he could not occupy the important position which he fills today. Nevertheless, he does not depend solely on the data which he can secure from the mercantile agencies and similar sources. Many concerns have adopted their own system of credit reports from present and prospective customers.

National Association of Credit Men's Form.—The form recommended and indorsed by the National Association of Credit Men does not differ materially from that used by bankers, but it is believed that the exact form is of interest to those who are anxious to ascertain the point of view of men *to whom* reports are frequently addressed. As stated elsewhere, the auditor who prepares his reports in a form easily read and easily understood by those for whom they are intended will be the most successful.

Preceding the form is the following pertinent observation:

> Large assets are not always necessary to the creation of credit. What is most desirable is, that credit be in relative proportion to the actual assets. The giver of credit is a contributor of capital, and becomes, in a certain sense, a partner of the debtor, and, as such, has a natural right to complete information of the debtor's condition at all times.

Just as in the case of the forms of statements asked for by bankers,[1] so the credit men's form indicates the business man's desire, when surveying a financial situation, to have the assets stated in the order of their availability, starting with the most liquid, and the liabilities in the order of urgency as to payment. When it is realized with what unanimity bankers and credit men indicate their preference for a form of financial statement in which assets and liabilities are arranged in the manner above mentioned, it is all the more surprising that so many corporations still persist in publishing their balance sheets in a form which sets forth fixed assets as first and cash as last among the assets, and capital stock as first and surplus as last among the liabilities, when in fact neither one of the latter is an actual liability.

It is evident from the phraseology and arrangement of the form of statement recommended by the National Association of Credit Men, that reserves for doubtful accounts properly are intended to be deducted from receivables before stating the amount or value thereof, and that depreciation reserves are likewise to be

[1] See pages 378–380, 382–385, 387–392.

PROPERTY STATEMENT

Form Adopted and Recommended by the National Association of Credit Men

For the purpose of obtaining merchandise from you on credit, we make the following statement in writing, intending that you should rely thereon respecting our financial condition as of (Date)_____ 19___

(All questions should be answered. When no figures are inserted, write word "None.")

ASSETS			LIABILITIES		
Cash in hand			For MERCHANDISE:		
Cash in bank			Accounts owing not due		
Accounts owing by customers, good and collectible, not pledged or sold			Accounts owing past due		
Notes owing by customers, good and collectible, not pledged or sold			Trade Acceptances payable		
Trade Acceptances receivable, not pledged or sold			Notes payable for Mdse.		
Merchandise: (not on consignment or conditional sale.) (How valued; Cost____ Market____)			For BORROWED MONEY:		
			Notes payable to banks		
			Notes or debts payable to others (including relatives and friends)		
Other quick assets:			Deposits of money with us. (Describe)		
(Describe)					
			Owing for Wages and Salaries		
			Owing for Taxes (city, state and federal)		
			Owing for Rental		
			Owing for Insurance Premiums		
TOTAL QUICK ASSETS			TOTAL QUICK LIABILITIES		
Machinery: (How valued; Cost____ Depreciated____)			Debt secured by mortgage on land or buildings		
Fixtures and other Equipment. (How valued; Cost____ Depreciated____)			Debt secured by chattel mortgage or other liens		
Land and Buildings as described below			Debt secured by judgment		
			Other liabilities:		
Notes and Accounts owing from officers, employees, or others not customers			(Describe)		
Other assets:			TOTAL LIABILITIES		
(Describe)			NET WORTH — Capital Stock — Preferred		
			Common		
			Surplus and Undivided Profits		
TOTAL ASSETS			TOTAL		

What books of account do you keep?_____

Was this statement made from those books?_____ Do you keep cost records?_____

Do you sell or pledge your accounts to creditors, banks, finance companies or others?_____. If so what amount is so sold or pledged? $_____ What amount of your accounts have you sold or pledged during the past twelve months? $_____

Are any creditors secured by mortgage or lien of any sort?_____ If so, how?_____

Are any claims in attorneys' hands or suits against you?_____

Have you merchandise on consignment or conditional sale?_____. If so, what amount? $_____

If business property is leased, for what term and what rental?_____

Name and locality of your bank or banks_____

Location and kind of business_____

Under the laws of what state is your business incorporated?_____

Previous business experience_____ Where_____

It is important that every question on both sides of this sheet be correctly answered and that the blanks be carefully filled in. In answering questions involving amounts write the word "none" where figures do not apply. You will find it advantageous to keep a copy of this statement for comparison with the showing you will be able to make a year hence.

INSURANCE

On Merchandise $_____ On Buildings $_____ Machinery $_____ Fixtures $_____

Other Equipment $_____ Employers' liability $_____

Is any insurance assigned?_____ What amount?_____ To whom?_____

Amount of life insurance for benefit of business $_____

With what companies_____

SUMMARY OF PROFIT AND LOSS

Inventory of Mdse. beginning of fiscal year (not including fixtures or equipment)			Sales last fiscal year		
			Income from all other sources		
Cost of Mdse. purchased during the year			Inventory of Mdse. at close of year		
			Total Income for year		
General expenses including salaries, losses, etc.			Less Total Expenses		
TOTAL EXPENSES			NET PROFIT FOR YEAR		

RECORD OF LAND AND BUILDINGS

Title in name of	Description and location	Book value	Assessed value	Amount of Encumbrances	To whom

BUY PRINCIPALLY FROM THE FOLLOWING CONCERNS

Names	Addresses	Amount Owing	
		Open Account	Notes

Names and Addresses of Partners, or if Corporation, of Officers_____

REMARKS:

The foregoing statement has been carefully read (both printed and written matter) and is in all respects complete, accurate and truthful. It discloses to you the true state of my (our) financial condition on the date above stated. Since that time there has been no material unfavorable change in my (our) financial condition; and if any such change takes place I (we) will give you notice. Until such notice is given, you are to regard this as a continuing statement.

Name of Individual, Firm or Corporation_____

Signed by_____

Street_____ Town_____ State_____

Date of signing statement_____ 19____

Form 11

deducted from the assets to which they apply, and the net value of such assets entered in the statement.

The importance to the grantor of credit of knowing whether or not any of the assets have been hypothecated or are encumbered by liens of any description, is evident from the statement. Bitter experience has taught credit men that this is one of the most vital elements involved in a credit situation.

Forms Issued by Mercantile Agencies

To complete the presentation of the forms in general use throughout the United States, we will next consider the ones issued by two leading mercantile agencies. These forms are supplied to practically every business concern, and are therefore more familiar to the average business man than any others. The arrangement of these forms is not ideal, and the information which may be gathered from them falls far short of that supplied in forms used by the bankers' and credit men's associations. It is possible that the agencies do not feel at liberty to request a statement as full as the others, but it is obvious that their forms could be improved without seriously affecting their chances of securing information.

It has been suggested that the mercantile agencies, in addition to requiring information on their own forms, call for financial statements certified to by professional auditors. It would be entirely feasible to assign preferential ratings to concerns which furnish satisfactory audited statements. The mercantile agencies would assume no more risk than they now incur; credit grantors would secure information vastly more trustworthy than that which is usually furnished; and the concerns which furnish the audited statements would properly benefit, as compared with the concerns which would not or could not submit their accounts to the scrutiny of independent and disinterested auditors.

The corporation forms in use by the two large agencies, Dun's and Bradstreet's, are as follows:

63—Statement of Incorporated Co.

SENT OUT..... No..... RETURNED.....

Business Established 1849.

THE BRADSTREET COMPANY,

INCORPORATED.

Executive Offices, 346 and 348 Broadway, New York.

OFFICES IN THE PRINCIPAL CITIES OF THE UNITED STATES, CANADA, CUBA, MEXICO, AUSTRALIA, AND IN LONDON, ENGLAND, WITH AN ESTABLISHED LIST OF CORRESPONDENTS THROUGHOUT THE CIVILIZED WORLD.

NEW YORK OFFICE—346 and 348 Broadway.

New York City,.....192

M.....

.....

We respectfully request that you furnish us a statement of your financial condition, on the within form, in such detail as you may elect, with a view to insure the correctness of our report. By so doing the chances of error will be lessened and confidence inspired in the minds of grantors of credit.

Those of whom you buy must get information regarding your responsibility, and employ The Bradstreet Company to make the necessary investigation. That we may be better enabled to serve them and yourself is the sole object in making this request.

We ask such attention as the subject deserves.

THE BRADSTREET COMPANY.

7-20-'21-5m

Per.....

63—Statement Incorporated Co.

Date.....19....

Statement made by.....

Corporate Style.....

Business.....

Where located—

NAME OF CITY OR VILLAGE.....

COUNTY.....

STREET AND NUMBER.....STATE.....

Date of Charter.....

Incorporated in what State.....

Commenced when.....

Succeeding whom.....

.....

OFFICERS.

Full Given and Surnames.	*Residence.*
President	
Vice-President	
Secretary	
Treasurer	
Manager	

DIRECTORS.

Full Given and Surnames.	*Residence.*

CAPITAL

	Authorized	*Subscribed*	*Paid in*
Common Stock,	$	$	$
Preferred Stock,	$	$	$
How Paid in:			
In cash,		$	
Patents, trade-marks, patterns, etc.,		$	
In other property,		$	$

Give particulars and the value of each kind of property

ASSETS, ---------- 19

Cash in bank,	$
Cash on hand,	
Notes receivable, actual value,	
Accounts receivable, actual value,	
Merchandise (finished and unfinished),	
Raw Material,	
Machinery and fixtures,	
Real Estate,	
Other investments (specify)	
TOTAL ASSETS,	$

How much, if any, of above Accounts Receivable have been assigned or pledged for loans, $

LIABILITIES, ---------- 19

Capital stock paid in,	$
Surplus and undivided profits,	
Bills payable,	
Accounts payable,	
Bonded debt,	
Mortgage on real estate (not included as Bonded debt),	
Chattel mortgage on all kinds of property,	
Borrowed money from banks (not included above),	
" " " individuals (not included above),	
All other liabilities,	
TOTAL LIABILITIES,	$

How much, if any, of the above indebtedness is past due, $

OVER

Amount of annual business, - - - - - - - - - - $_____

Amount of annual expenses, - - - - - - - - - - $_____

Annual dividend_____

Surplus (not including undivided profits), - - - - - - - $_____

Indebtedness of company to stockholders included in liabilities_____

Amount of insurance on merchandise, - - - - - - - - $_____

Amount of insurance on buildings and plant, - - - - - - $_____

Ever had a fire; if so, give particulars_____

_____

_____

Is plant protected by automatic sprinklers_____

Other interests of *principal* directors_____

_____

_____

Bank with_____

TRADE REFERENCES FROM WHOM PRINCIPAL PURCHASES ARE MADE.

Give Address of Each.	*Amount Owing*
Name_____	$_____
Address_____	
Name_____	$_____
Address_____	
Name_____	$_____
Address_____	
Name_____	$_____
Address_____	
Name_____	$_____
Address_____	
Name_____	$_____
Address_____	

REMARKS.

_____

_____

_____

_____

_____

*Sign here*_____

Official Signature.

FOR THE PROMOTION AND PROTECTION OF CREDIT

ESTABLISHED 1841

THE MERCANTILE AGENCY

R. G. DUN & CO.

Principal Offices: Dun Building, 290 Broadway, New York City

Branch Offices in the Principal Cities of the World

_____ 19____

"Statements" as an Aid in Determining Credits

"A WELL MANAGED CREDIT amounts to ten fold the funds of a merchant: And he gains as much by his credit as if he had ten times as much money. This maxim is generally received among all merchants. Credit, therefore, is the greatest wealth to everyone who carries on commerce." In commercial countries the use of credit in the place of money vastly exceeds the use of money. Goods sold and delivered in exchange for promises to pay money vastly exceed in value goods sold and delivered in exchange for money.

In a credit transaction it is the right of one party to receive and the duty of the other to give information sufficient to enable the one proposing to become a creditor to form an intelligent opinion as to the probable ability of the one proposing to become a debtor to fulfill his promise to pay. The object of THE MERCANTILE AGENCY is to obtain and communicate information relating to the amount of credit which one party to a credit transaction may prudently give and the other party may prudently accept. The disaster to one through accepting too much may be greater than the disaster to the other through giving too much. The usefulness to both the two classes of parties of their availing themselves of the service of THE MERCANTILE AGENCY for that purpose has been proved by their experience through all the years since 1841.

These are the grounds upon which we respectfully make application for the information indicated by the form of this "Statement," a statement which it is our intention to communicate to such of our subscribers as may have occasion to consider the subject of credit transactions between the maker of the statement and themselves. The usefulness of such statements to those who make them has been so abundantly proved by experience that the making of them has become the common practice. That usefulness is found not only in the obtaining of credit, but in the warning not to accept credit too much in amount or maturing at times when there may be an inability to pay. Statements made upon the results of a careful examination of things as they really are and under a disposition to avoid the common error of an overvaluation of assets are protective to debtor and creditor alike.

Information not expressly called for by this printed form, which may serve to prove or indicate the degree of probable accuracy of figures, or which should be considered both by him who gives and him who accepts credit, is requested, and may be stated in a paper attached to the form and identified by a signature and date. It is recommended that a copy of the Statement be placed upon the files of the person who makes it.

R. G. DUN & CO.

STATEMENT—Form D (N. Y.) MERCANTILE CORPORATION

STATEMENT AS A BASIS FOR CREDIT MADE TO
THE MERCANTILE AGENCY
R. G. DUN & CO.

By.....**a Corporation,**
Engaged in.....**Business**
At.....**County of**.....**State of**.....
Date to which all the items of the statement relate.....19.....

When incorporated.....Under laws of.....
Succeeding.....
Authorized Capital Stock, $.....No. of shares: preferred.....common.....Par value, $.....
Amount of Capital Stock subscribed, $.....Amount paid in (IN CASH), $.....
Amount paid in otherwise than cash and how, $.....
.....
Limit of indebtedness allowed, $.....Bonded debt, $.....drawing interest at.....per cent.
Bonds secured by.....Is there a sinking fund?.....

ASSETS. {Where no figures are entered use the word NONE}		LIABILITIES. {Where no figures are entered use the word NONE}	
Merchandise on hand at cash value,	$	For merchandise (open account),	$
Value of fixtures,		For merchandise (notes payable),	
Accounts receivable at realizable value,		Loans from bank,	
Notes receivable at realizable value,		Loans from other sources,	
Cash on hand,		Mortgages on real estate,	
Cash in bank,		Other obligations,	
Real estate and buildings owned by Co.		Capital stock issued,	
Other assets consisting of.....		Surplus in use as Capital,	
		Undivided profits,	
Total assets,	$	Total,	$

Any past due indebtedness, and if any, how much? $.....
If any of the above accounts are pledged, state the amount, $.....
Are there any existing liens on personal property not mentioned above? If so, what?.....
.....
Contingent liabilities upon bills of exchange, endorsements, guarantees, etc., $.....
.....
Annual business amounts to $.....Bank with.....
Do you keep books of account of the business?.....
If so, what books?.....
Is the statement of value of stock on hand made upon the basis of an inventory actually taken? And if so, on what date?.....
What in your opinion is the total amount of your assets and of your liabilities as they are at the date of signing this statement? Total assets, $.....Total liabilities, $.....
FIRE PROTECTION: State its general nature—public fire department, sprinkler system, fire extinguishers, night watchman, etc.
.....
INSURANCE: On Merchandise, $.....On Buildings, $.....
Did you ever suffer a fire loss?.....If so, where and when?.....
Did fire originate on your premises?.....
Do you carry employer's liability insurance?.....
OFFICERS: President,.....Vice-President,.....
Secretary,.....Treasurer,.....Gen'l Manager,.....
Names of Directors:.....
.....

Date of signing statement.....19.....

.....
Sign name of corporation here.

OVER Signed by,.....

IMPORTANT

Kindly give the names of a few houses from whom you make your largest purchases.

NAME	STREET ADDRESS	CITY AND STATE	AMOUNT OWING
			$

BANK WITH:

OTHER REFERENCES:

CHAPTER XX

CERTIFICATES AND REPORTS (Continued)

The discussion in the previous chapter is not complete without reference to the effect of liens upon assets, form of income accounts, and graphic charts. These will be discussed here.

Liens and Hypothecations

Instances are known of certified balance sheets which have shown accounts receivable and merchandise inventories among the assets without any qualification, when really they were pledged as security for loans, and thus were not assets in the sense in which anyone using the balance sheets was entitled to assume.

A concern has accounts receivable of $10,000, stock-in-trade of $10,000, and accounts and bills payable of $15,000. If the latter are entirely unsecured, a prospective creditor might extend further credit if the concern's standing is good, on the theory that in the event of bankruptcy there could be a shrinkage in the assets of 25 per cent before a creditor would lose anything. But suppose it is found that all of the accounts receivable have been assigned to, and a chattel mortgage on the stock taken by, a creditor for $10,000. This means that in bankruptcy the unsecured creditors would probably receive nothing, or, at best, lose 50 per cent of their claims if the shrinkage in assets was only 25 per cent.

The professional auditor must never certify to a balance sheet without fully considering the possibilities of liens upon the assets, and if any are discovered, such liens must be plainly indicated on the face of the balance sheet or mentioned in the certificate; otherwise he is guilty of suppressing material information and can probably be held responsible in damages to anyone relying thereon who suffers loss in consequence.

If there is any difficulty in securing information of this nature,

the auditor may have to ask the question shown in the Credit Men's standard form. If he finds no trace of liens, and if the officers or partners state in writing that there are none, he cannot be held negligent. It is wrong, however, to rely on not finding any evidence; there should be affirmative proof that no liens exist.

Forms of Income Account

An income account or statement is one which assembles all income and expenses, or gains and losses, for a stated period. It is identical with the "revenue" statement sometimes presented, but since the term "revenue" is usually used to designate one side only of an income account, the term is not properly applicable to a statement which includes expenses as well as income. Formerly to a considerable extent, and now to a limited extent, the word "income" is used for only one side of an account; the practice, however, is steadily decreasing. The author has no objection to the use of the term "profit and loss" in published statements; but it has not grown in favor among accountants and, as accepted accounting terminology should consist of the terms most frequently used, it is suggested that the use of the terms "profit and loss" and "loss and gain" be limited to ledger captions and to describe specific ledger accounts, and that the term "income account" be used as a caption for the general statement which accompanies a balance sheet.

The income statement may be divided into as many sections as are desirable or necessary. The student of accountancy is usually taught to prepare it in two sections, the first being called the trading or manufacturing account, and the second the general profit and loss account. This illustrates the principles of grouping and permits the calculation of percentages which are extremely valuable for comparative purposes. The trading or manufacturing account usually shows on one side net sales, and on the other prime costs of sales, i.e., materials used, labor, and other direct expenses. In some cases other expenses are included, such as rent, interest, taxes, etc.

In modern practice it is not customary to submit a trading or a manufacturing account under these captions. The experienced auditor or accountant compiles an income account suited to the requirements of the enterprise upon which he is reporting, and in a form understandable to those who are to use the report.

ILLUSTRATION.—The following condensed form of income account was submitted to the St. Louis Congress of Accountants, in 1904, by Sir A. Lowes Dickinson, C.P.A.:

Gross Earnings (whether sales of products, transportation earnings, professional earnings, etc.)		$.....
Deduct—Cost of Manufacture or Operation:		
(a) Manufacture (for a manufacturing concern):		
Labor	$.....	
Material	.....	
General Manufacturing Expenses	.....	
(b) Cost of Operation (for concerns not manufacturing):		
(Under suitable headings according to the nature of the business)	.....	.....
Gross Profits		$.....
Other Earnings		.....
		$.....
Deduct:		
Expenses of Sale (manufacturing business only)	$.....	
Expenses of Management (if distinct from operation)	.....	.....
Net Profits from Operations		$.....
Deduct:		
Interest on Bonds	$.....	
Other Fixed Charges	.....	.....
Surplus for the year		$.....
Extraordinary Profits (detailed)		.....
Surplus brought forward from preceding year		.....
		$.....
Deduct:		
Extraordinary Charges not applicable to the operations of the year	$.....	
Interest and Dividend on Stocks	.....	.....
Surplus carried forward		$.....

If further information is required, the condensed statement is supported by schedules or exhibits which go into as much detail as is necessary.

Form Used in Examination for C.P.A. Degree.—The following form of statement was used in the examination held by the American Institute of Accountants, May 18, 1921:

Condensed Profit and Loss Statement
for the calendar year 1920

Gross Sales (shipments)	$240,000.00
Less: Return Sales and Allowances	5,000.00
Net Sales	$235,000.00
Deduct:	
Cost of Goods Sold (shipped)	153,300.00
Gross Profits on Sales	$ 81,700.00
Deduct:	
Selling and Administrative Expenses	32,675.00
Net Profit on Operations	$ 49,025.00
Add:	
Net Financial Income	975.00
Net Profit for the calendar year	$ 50,000.00

No special provision is made in this form for depreciation and taxes. It cannot be assumed that those two items are included among administrative expenses. The term "net financial income" is not in general use and is unintelligible to the average man.

Comparisons to Be Shown.—The auditor should strive so to arrange the accounts as to show a comparison with previous periods; also, if the nature of the business permits, unit costs or earnings should be shown. For instance, the accounts of a taxicab company, if properly set up, show the average gross earnings of cabs per day. They also show the operating cost per mile. Perhaps the simplest illustration is a blast furnace. It is relatively easy to determine the cost of producing a ton of pig iron,

but the figures are of little value unless the output is shown along with the average cost. The production for one week may be 10,000 tons at an average cost of $8 per ton; if the production the next week is 15,000 tons at a cost of $8 per ton, the natural inquiry is: Why is not the cost proportionately less upon the greater output? If the cost per ton is reported separately from the production, attention may not be called to the possibility that lower costs are in order.

The ratio of each class of expense to the total volume of business is always interesting. In dull times certain so-called fixed charges may not be expected to vary, but there are other classes of expenses which should fluctuate ratably with the volume of business.

The auditor who states the accounts of a number of concerns in the same line of business can readily acquire a knowledge of income and costs which he may impart for the benefit of all at the expense of none. He must not divulge to one client the affairs of another, but if he ascertains that the office staff of one wholesale grocer costs 1 per cent per annum of the sales, while another costs one-half of 1 per cent and is equally or more efficient, he certainly is justified in making a special investigation into the matter, and cannot be criticized for reporting that 1 per cent is excessive.

General Provision for Depreciation, Taxes, etc.—The expression, "balance available for depreciation, amortization, depletion, and taxes," is *very bad* practice. Bankers seem to think that interest can be met out of the general reserves, mentioned above. For a limited period this is true, except as to taxes, but even then the postponement may be for a year only. Depreciation reserves may be available for several years. Depletion alone may be permanent. But it is not good practice in published statements to omit the amounts reserved in the books, or to indicate that such reserves may be used for the payment of interest.

GRAPHIC CHARTS

Use of Charts and Graphs

The use of charts by engineers probably dates back to the early days of that profession. The use of charts by accountants is of a more recent date. It is not as common as it should be. This is due to the general attitude of the client or business man who is unfamiliar with the value of such means of presenting facts. The auditor is at fault if he does not ascertain whether the client is interested in charts and follow this inquiry by sufficient explanation so that when a chart forms a part of a report its value is appreciated.

Essentials of a Good Chart

Charts must be simply and neatly drawn. A chart elaborately lettered but inaccurately drawn loses its value, although such charts are common. Those using charts expect to obtain at a glance the information which the chart purports to convey. The auditor must be cautioned that the value of the chart is not to be lessened by introducing too much extraneous material. A title which is concise and self-explanatory is an indispensable part of a chart.

It is easy to exaggerate the facts illustrated by altering the scale to which the chart is plotted. Care and skill in the preparation of charts are essential; but a little practice should enable the auditor to develop statistics in graphical form. Where necessary, a scale should be given to assist in interpreting the chart.

Types of Charts

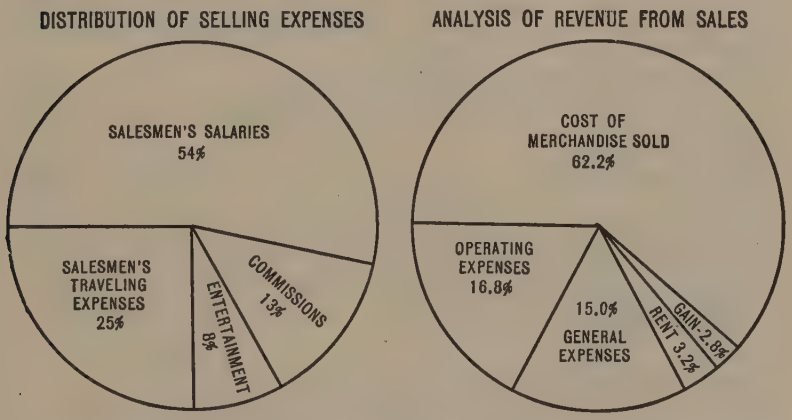
There are three types of charts or graphs with which the auditor should be familiar. These are generally referred to as: the circle type, the bar or column type, and the curve or broken line type. As a rule, only one of these types of graphs can be used to illustrate clearly certain facts or data. It is very neces-

sary that the auditor should know which type of chart to use in each case, but with experience in the preparation of charts he should have no difficulty in making a decision.

The charts shown on the succeeding pages are illustrative of the principles that make up a good chart.

Circle Type

Two circles are shown below. The area of one represents the total selling expenses (100 per cent). The expenses that make up the total are shown in the sectors of the circle. This is a form that is popular with some business men although it possesses but few advantages and is not readily adaptable to extensive



development. This can best be seen by examining the other circle. This area represents the analysis of the revenue from sales. It will be noticed that the gain is shown as a sector of the circle, but if it is necessary to indicate a loss, it cannot be clearly illustrated with a circle type chart in which case it is evident that some other form must be substituted.

Bar Type

The bar type chart on page 413 illustrates the analysis of the revenue from sales over a period of four years by means of propor-

tionate length columns. This chart brings out not only the relations which the costs and expenses bear to each other in a given year, but the relation between similar costs or expenses in the different years. The loss is easily indicated by a negative position being placed below the base line.

The client is interested to learn the cause of the losses in the years 1918, 1919, and 1920. It is quite evident that the operating expenses and rent have remained nearly constant during the four years, yet the results change from a profit in 1917 to a loss in the other years. The cause for this decided drop lies in the fluctuation of the cost of merchandise sold. The greater the cost, the greater the loss, as is evident in 1919 when the cost of merchandise sold amounted to 74 per cent of the total sales revenue and the loss was 10 per cent, whereas in 1917 the cost of merchandise sold was 55 per cent.

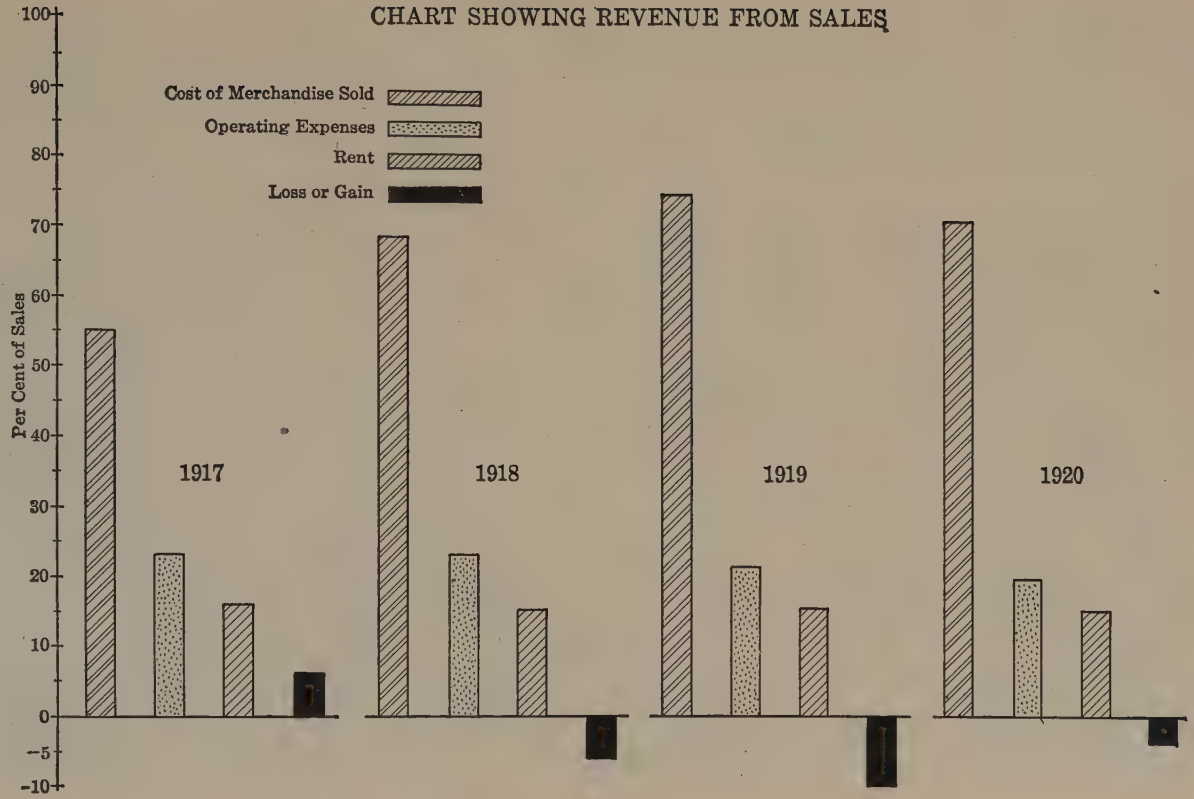
A glance at the chart suffices to explain the reason for this unfavorable result.

Attention is directed to the use of a legend giving the meaning of the symbols used in marking the columns, which also increases its value for ready reference. The gain or loss might be shown in red, the rent in blue, the operating expenses in black, and the cost of merchandise sold in green.

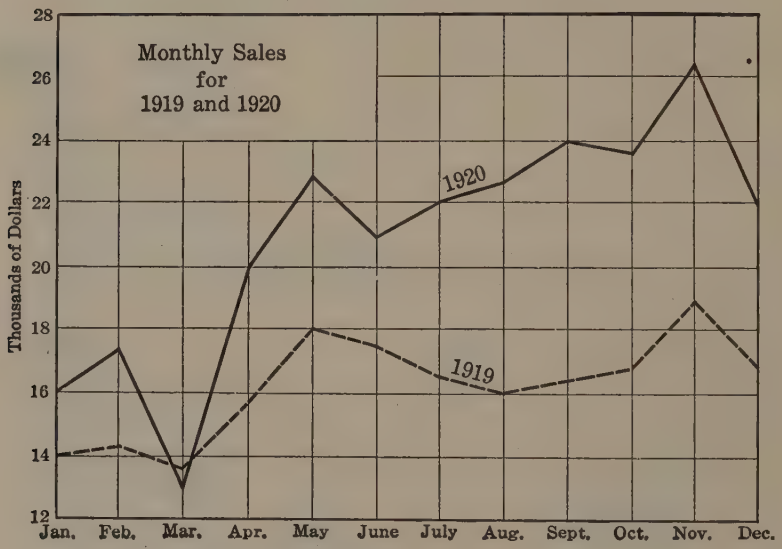
Broken Line or Curve Type

The third type of graph, as illustrated on pages 414 and 415, is the broken line or curve type. This type of chart does not possess all the advantages of the bar type and lacks the flexibility of the latter, but it is also popular with some business men. An effective use of this type is given in two parts; one shows the sales by months for two years and the other accumulated monthly sales for the same periods. This is a very good type to use where comparisons are of great importance. The charts can be prepared at the commencement of a fiscal year, showing comparative sales by months and the accumulative totals for the preceding year. In an examination of the upper chart it will be noted that

CHART SHOWING REVENUE FROM SALES



during 1919 the monthly sales in January were $14,000, going up to $18,000 in May, down to $16,000 in August, up to $19,000 in November, and down to $17,000 in December. These figures are shown by the dotted line. The year 1920 (solid line) commences with $16,000, a gain over the previous year, as clearly shown by the chart. In May the increase is not only maintained, but the rate of gain is increased.



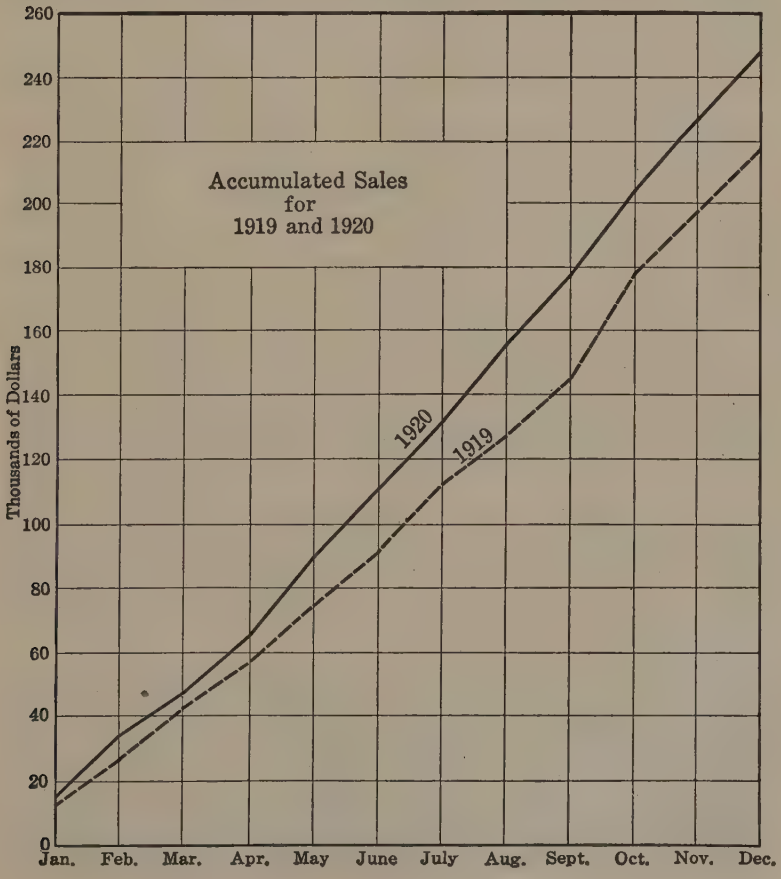
In other words, a chart will show a trend which columns of figures fail to emphasize. The best place for a chart of this kind is on the wall of an office or on a map holder. It may be kept private by having a cover over it or it may be rolled up. The auditor may submit a sample chart, based on past experience, which will indicate the possibilities of the plan.

For a more thorough discussion of the principles and for a wider range of illustrations, the reader is referred to "How to Make and Use Graphic Charts" by Haskell, and "Graphic Methods for Presenting Facts" by Brinton. The following quotation is taken from the latter book:

Though accurate data and real facts are valuable, when it comes to getting results, the manner of presentation is ordinarily more important than the facts themselves. . . . Unless the facts are presented in a clear and interesting manner, they are about as effective as a phonograph record with the phonograph missing.

If it were more generally realized how much depends upon the method of presenting facts, as compared with the facts themselves, there would be a great increase in the use of graphic methods of presentation.

If the facts were put in graphic form, not only would there be a great saving in the time of the readers, but there would be a gain to



society, because more facts could be absorbed and with less danger of misinterpretation.

Value of Comparative Statistics

The head of the fidelity department of a large surety company states that a great many irregularities and defalcations, especially those which take the form of the padding of pay-rolls, would be uncovered in their infancy if the managements of factories and commercial business houses would pay more attention to their accounts and have their accounting departments compile comparative statistics of their businesses—and then study them. He cites the case of a cashier of a manufacturing concern who had been padding the pay-roll for years. It was the practice of this concern to have the pay-roll approved by the foreman, the superintendent, and the general manager. It was sent to the cashier, who made alterations in the total figures, drew a cheque for the raised amount, cashed it, and paid off the men. The pay-roll did not leave the cashier after it was given to him to draw the cheques, and he made the distribution for posting. This went on for years, the cashier each week pocketing from $200 to $900. At last a change of executives brought in a manager who had been accustomed to make his accounts show in statistical form the economic condition of his business. He had been employed in the same line before and he knew that the price of raw material, the rates for wages, and the various expenses were about the same as in his former place; but the income account showed a much smaller net income. It was soon found that this was due to the high charge for labor. Upon analysis of this charge the stealings were discovered.

This is but one instance, yet it is easy to see that by showing the result of a business in graphic form so that the relation of the various elements, one to another, is easily seen, abnormal conditions are at once detected. Some may say that these things are interesting and all very well if one had the time and money to get them up. They do not realize the cost of *not* getting them up.

Statistics compiled by one of the large bonding companies in the United States show that during the first six months of 1921 claims amounting to more than $1,250,000 were made against this one company on account of defalcations. The claims made by banks alone amounted to almost $500,000.

What Not to Report

As heretofore stated, it is not wise to report unimportant errors, etc., chiefly because it accomplishes no useful purpose, even if true. In any event criticisms of this nature should never be made without confirmation from the office staff, because they may be able to come back with proof that the errors or omissions are apparent only.

Likewise, long schedules of trade debtors and creditors are superfluous. For some years public accountants made it a rule to furnish their clients with detailed schedules of accounts receivable and payable, believing that such information was desired by them and would be of value. They found, however, that in nine cases out of ten these schedules were not referred to, and that in the one case remaining the schedules desired were the *latest* ones rather than the ones submitted by the auditors, which were usually one or two months old. The practice was therefore quite generally abandoned, and such schedules are now furnished only on request.

In reports in which special circumstances govern, such as changes in partnership, it may be necessary to submit detailed schedules. The above remarks refer only to the ordinary periodical audit and to balance sheet audits.

A schedule of vouchers and paid cheques not submitted is sometimes of importance; but, as a rule, it is preferable to prepare such a list before completing the audit and to hand a duplicate to the bookkeeper, so that the missing vouchers may be located. After as many as possible are located, the corrected list should be handed to the proprietor with a request that he examine it. If further inquiry or search is requested, it should be made *before*

the audit is completed. If no further attention is required, the schedule is not important enough to be put in a report.

The auditor should scan the list of outstanding unpaid bank cheques. A cheque is sometimes issued to close a disputed account, etc. This fact renders it desirable, from both the client's and the auditor's point of view, that it be used. The inspection should apply only to those outstanding an unreasonable length of time. If any doubt arises the matter should have attention at once, but no mention of it need be made in the report unless some irregularity is discovered.

Restrictions on Client's Use of Reports

Mention has been made of the attempted but unauthorized use of auditors' reports and certificates. This is obviated by a judicious selection of clients; but perhaps a client who has paid for a report will feel at liberty to use part of the contents without disclosing the context. Anticipating this possibility, experienced auditors bind and fasten their reports securely together, and page them in such a way that a part cannot be used without revealing the fact that it is not complete.

It does not seem feasible to suggest any plan whereby clients or others can be prevented from *quoting* from a report. So long as the statement is not made that the quotation represents conclusions of fact to which an auditor has certified, it may not be objectionable; but it is remarkable how critical business men are regarding the connection, real or alleged, of a professional auditor with men or enterprises of doubtful character.

In one case a well-known firm of auditors had for many years audited and certified to the accounts of a small but prosperous corporation. A large concern bought the small company and consolidated it with a number of others. The bankers who marketed the stock stated in their circulars that the accounts of the small company had been audited by the well-known firm, whereas the accounts of all the others, and of the holding company, had been audited by an audit (stationery) company. The

latter continued the audit until the holding company went into hopeless bankruptcy. The well-known firm was not connected with the enterprise after its clients sold out; but after the bankruptcy occurred, a large banking house intimated that the mention of the firm's name in a circular relative to a company with such an objectionable history seriously affected their own attitude in employing the firm for accountancy work.

This is an extreme case, but it illustrates the great importance to an auditor of restricting the use of his name to professional work which is creditable to him in every way, and of making engagements only with clients or promoters who are beyond suspicion.

Misleading Advertisements

Auditors are sometimes requested to compile data or statistics, or to prepare calculations for use in new enterprises. Great care must be taken to restrict the use of the reports to the purposes for which they are submitted.

Recently an issue of preferred stock was advertised and a large bonus of common stock was offered as an inducement to purchase. The following statement was made *inter alia:*

> Based on reports of A & B, certified public accountants, on manufacturing costs and selling prices from six months' operation at part capacity of plant at Blank City, EARNINGS AT FULL CAPACITY ARE ESTIMATED AT OVER 35 PER CENT ON THE COMMON STOCK AFTER PAYMENT OF 7 PER CENT DIVIDENDS ON PREFERRED STOCK.

Clearly, the purpose of the foregoing was to deceive. It was so printed that everyone gathered the impression that the auditors had made a report to the effect that earnings equal to 35 per cent on the common stock might be expected.

It may become necessary for auditors to print on their stationery some form of notice to the effect that no public use can be made of the information conveyed unless a memorandum setting forth the form of the proposed use is first submitted for their inspection. Unquestionably many advertisements, parti-

cularly bankers' circulars, contain misleading compilations and conclusions purporting to be drawn from accountants' reports; in many cases the reports themselves are not published. The most flagrant cases are those which conceal the aggregates of federal taxes, depletion, depreciation, etc., during the war years, making it appear that those years were highly prosperous ones, whereas many concerns which apparently made large profits were worse off, net, at the end of 1919 than at the beginning of 1917. The practice is a vicious one. It is difficult to prevent because some individual cases do not seem to be objectionable. Probably the only solution is for the American Institute to prescribe the form which quotations from accountants' reports may take.

Compulsory Reports

Compared with our lack of legal requirements, it is of interest to note what reports must be prepared in England and Canada.

The following is an extract from Table A of the English Companies Act of 1908:

Section 106. Once at least in every year the directors shall lay before the company in general meeting a profit and loss account for the period since the preceding account or (in the case of the first account) since the incorporation of the company, made up to a date not more than six months before such meeting.

Section 107. A balance sheet shall be made out in every year and laid before the company in general meeting made up to a date not more than six months before such meeting. The balance sheet shall be accompanied by a report of the directors as to the state of the company's affairs, and the amount which they recommend to be paid by way of dividend, and the amount, if any, which they propose to carry to a reserve fund.

Section 108. A copy of the balance sheet and report shall, seven days previously to the meeting, be sent to the persons entitled to receive notices of general meetings in the manner in which notices are to be given hereunder.

Audit: Section 109. Auditors shall be appointed and their duties regulated in accordance with sections 112 and 113 of the Companies

(Consolidation) Act, 1908, or any statutory modifications thereof for the time being in force.

The following is an extract from the Dominion Companies Act, R. S. C., Cap. 79 (1908 as amended in 1917):

Section 94a. (1) Every company shall at each annual general meeting appoint an auditor or auditors to hold office until the next annual general meeting.

(2) If an appointment of auditors is not made at an annual general meeting, the Secretary of State of Canada may, on the application of any shareholder of the company, appoint an auditor of the company for the current year, and fix the remuneration to be paid to him by the company for his services.

(3) A director or officer of the company shall not be capable of being appointed auditor of the company.

(4) A person, other than a retiring auditor, shall not be capable of being appointed auditor at an annual general meeting unless notice of an intention to nominate that person to the office of auditor has been given by a shareholder to the company not less than fourteen days before the annual general meeting; and the company shall send a copy of any such notice to the retiring auditor, and shall give notice thereof to the shareholders, either by advertisement or in any other mode provided by the by-laws of the company not less than seven days before the annual general meeting:

Provided that if, after notice of the intention to nominate an auditor has been so given, an annual general meeting is called for a date fourteen days or less after the notice has been given, the notice, though not given within the time required by this provision, shall be deemed to have been properly given for the purposes thereof, and the notice to be sent or given by the company may, instead of being sent or given within the time required by this provision, be sent or given at the same time as the notice of the annual general meeting: Provided, however, that a person other than a retiring auditor may be appointed auditor of the company at an annual general meeting as hereinbefore provided, upon a resolution passed by the votes of shareholders present in person or by proxy and holding at least two-thirds of the subscribed stock represented at the meeting.

(5) The first auditors of the company may be appointed by the directors before the first annual general meeting, and if so appointed shall hold office until the first annual general meeting, unless previously removed by a resolution of the company in general meeting, in which case the company at that meeting may appoint auditors.

(6) The directors may fill any casual vacancy in the office of auditors, but while any such vacancy continues the surviving or continuing auditor or auditors, if any, may act.

(7) The remuneration of the auditors of a company shall be fixed by the company in general meeting, except that the remuneration of any auditors appointed before the first annual general meeting, or to fill any casual vacancy, may be fixed by the directors.[2]

---

[2] 7–8 Geo. v., c. 25, s. 11. Imp. Act, 1908, s. 112.

CHAPTER XXI

INVESTIGATIONS

Part of the work of the professional auditor is designated, not as an audit, but as an investigation. There is here an actual distinction, just as the work of the accountant may be differentiated from that of an auditor.

For the purposes of this book, audits and investigations are separated only as to the special points to be observed in the latter, it being assumed that in many investigations a complete detailed audit is required, and that in others a balance sheet audit is essential.

Investigations are usually undertaken in connection with the sale of a business to a corporation or other purchaser for the purpose of obtaining special information relative to finances or general affairs, or with respect to alleged fraudulent transactions, or with respect to the profits derived from the manufacture of infringing articles, etc.

A curious feature connected with investigations, which rarely arises with respect to audits, is the attempt on the part of disreputable promoters, or of those with no reputation at all, to retain the services of reputable auditors. Usually in such cases the enterprise to be investigated lacks books of account and promises little for the future, or a company has been formed with a large capital stock issue against mining claims or some equally uncertain asset. A certificate is desired for publication, or for private exhibition to prospective investors.

In the hands of an honest man, an auditor's certificate in the ordinary form might be unobjectionable, but if the certificate is in the possession of an unscrupulous promoter, it may be represented to be an unqualified indorsement of the enterprise and its

promoters, and there are enough ignorant investors to believe these or stronger statements. The wise auditor never permits his certificate to be so used, for a single mistake of this kind in sizing up a client may mean the loss of one's reputation. Successful auditors can take no chances at all in this respect; they must be more particular about their clients than a bank is about its customers.

The various classes of investigations and the special features of each class will be discussed in the following order:

1. Upon the sale or purchase of a business.
2. To ascertain information required by:
   (a) Creditors, prospective creditors, or stockholders.
   (b) Parties to litigation or disputes.
3. Investigation of suspected fraud.

SCOPE OF THE WORK

Instructions from Clients

The title of this chapter may convey the impression that the work to be done is more or less restricted in its scope, and that the auditor who undertakes an investigation for a special purpose may expect to receive special instructions, differing from the circumstances under which he would be willing to make an audit. It is not claimed that an auditor would insist on proceeding with any professional work, including audits, which appeared to be even remotely in opposition to his clients' wishes. He could withdraw, and this would be the only proper course if he found himself unable to comply with the directions of those for whom his work was intended.

As a member of a profession with high ideals, he can insist, or in the exercise of his full prerogatives he can demand, that instructions outlining the scope of his work, or the form of his certificate and report, shall accord with honorable motives and straightforward dealing. Otherwise, he cannot proceed without forfeiture of his self-respect.

If the instructions are incomplete and the auditor fails to interpret them broadly, so as to include all of the results which are called for by the nature of the case, he should not attempt to excuse his deficient results by falling back on his instructions. Therefore, at the commencement of an investigation it is most important that specific instructions be issued by the client, or be prepared by the auditor and confirmed by the client.

Working Papers to Be Preserved

Following up his instructions from the client, the auditor issues special directions to his own staff. The remarks on working papers[1] apply with full force, and, in addition, special care must be taken to preserve all data bearing on the adjustment of the accounts. In few investigations does the auditor's report show accounts and amounts as they appear on the books. Even if net results are not altered, an analysis is made resulting in a different arrangement and presentation.

It is of the utmost importance that working sheets be prepared and retained which show in absolute detail the reconciliation of the original book figures with those appearing in the final report. Neglect of this precaution may subsequently result in censure for neglect, coupled with the necessity of duplicate work, for which a charge cannot, or should not, be made.

In some cases the working papers of an audit have to be referred to after the report is submitted, but in nearly all investigations, questions arise after the work is completed which require reference to the data compiled during the progress of the work. Opinions differ regarding the length of time working papers should be preserved. If storage space is available and not too expensive, it is desirable to hold them indefinitely; if storage space is expensive, papers may be destroyed after a reasonable time has elapsed. What is a reasonable time depends on the circumstances of each case.

[1] Page 47.

Detail Which May Be Omitted

If "investigation" were simply another name for an audit, this chapter would not have been written.

In general it may be stated that since an investigation is *not* an audit, but an inquiry into specific matters, the routine requirements of an audit as outlined in this book may be omitted. Later on, the features which must *not* be omitted will be discussed.

Previous Audits

It has also been mentioned that in an ordinary engagement the auditor often finds himself to be the first professional auditor who has been consulted. But with investigations, which are frequently called for in connection with consolidations of prosperous enterprises, it will be found that many of the latter have had their accounts audited. If the auditor can secure the reports of such examinations, he has a basis upon which to determine what use he can make thereof. Obviously this basis depends on the standing of the other auditors and the nature of their reports.

If access to previous reports cannot be had, the auditor should secure permission to consult with the previous auditors for the purpose of securing any information possible. If this is not feasible, he must proceed as if the accounts had never been audited.

Experience has demonstrated that failure to furnish pertinent data of any kind raises a prima facie case of interested concealment against those who reasonably may be expected to furnish the information. When information such as may be contained in previous auditors' reports is not promptly disclosed, the auditor is charged with a greater degree of watchfulness than if the existence of such information is unknown.

Where Assets Are Appraised

It is becoming fairly general practice in investigations to employ appraisers as well as auditors. The former must take the responsibility for physical valuations of fixed assets items, and, while this is of great assistance to the auditor, he should

never incorporate their valuations in his accounts without considering their relation to the income account. The auditor should steadfastly maintain that he cannot state the net income of a business irrespective of an examination of the assets and liabilities. If the book assets must be adjusted to an appraisal, the income account may require adjustment also. The word "may" is used advisedly, since some appraisal companies are inclined to overvalue physical assets. It is pleasing to proprietors (which may explain why it is done), but it does not always afford a reasonable basis for a writing up of book values and a consequent adjustment of the net income.

On the other hand, in view of this tendency, any insufficiency of assets shown by an appraisal should be reflected in the income account.

Definite Report Wanted

In order that there may be no misunderstanding, it should be understood that the author does not advocate submitting suggestions and criticisms based on mere hearsay, or on incomplete information. The point to be emphasized is that *all* facts pertinent to the inquiry are permissible and may be of more value than a mass of figures.

Certain adjustments are necessary in practically all investigations, but the auditor must be firm in arranging the results and in wording his report, or it may be found that the final conclutions are far from representing a well-thought-out opinion of the standing of the business.

Auditors have been very properly warned that if there is nothing definite for them to report, they should not be led into stating that if the expectations of the promoter are realized his estimates of the net income are correct.

Handling Books and Records

Before making a single mark of any description in a record which is the property of another, the auditor should ask himself

the question: "Is there any possibility of these records being falsified, and might it embarrass me later if it were shown that I had made marks herein?" In every case the question should act as a reminder that if marks are warranted they should be small, neat, and so made as to be readily and positively identified on any subsequent occasion.

If fraud is suspected, it is always desirable, and sometimes necessary, that no marks at all should be made. In such a case the entries which are falsified should be rewritten on loose sheets, paged the same as the original records, and the correct amounts shown in an adjoining column. This permits a summary of the fictitious entries being made up at any time. It involves an immense amount of work, however, and the auditor should advise his clients of its possible cost.

False Entries Sometimes Forgeries

The entry of an incorrect amount in a book of record, if made with intent to defraud, is forgery, and therefore a serious crime.

Frequently false entries are found in books which indicate that the one responsible therefor has misappropriated an equivalent sum of money, but it may be difficult to produce satisfactory evidence as to when and how the defaulter actually took the cash.

It is well known that a verdict of guilty is difficult to secure from a jury when the evidence consists largely of complicated and manipulated accounts. The defaulter's plea that his books were unfortunately mixed up, but that he never stole anything, appeals to the sympathy of the average man. If it can be shown conclusively, however, that certain entries are fraudulent on their face, it may be possible to prove a charge of forgery. An auditor should always be familiar with the law of his own state on this subject.

The Auditor as an Expert Witness

Few professional auditors escape their day in court as expert witnesses. The necessity usually arises out of investigations

where fraud or disputes are known to exist, but experience teaches that fraud may be discovered in any audit, and in cases where it is least expected. Therefore the auditor must look upon himself at all times as a potential witness. Neglect to give proper weight to this possibility has caused considerable embarrassment on more than one occasion when an auditor has placed someone in charge of an audit who is not qualified to make a creditable witness. Sometimes assistants, thoroughly equipped in other respects, are constitutionally unfitted to appear as expert witnesses.

Part of the program of an audit, consequently, is a provision for the substitution of an experienced senior or principal as soon as the work has gone far enough to warrant the assumption that an appearance as a witness is probable.

The author has testified as an expert witness scores of times, and submits the following suggestions based entirely on practical experience:

1. Preparation Is Always Essential.—The average lawyer does not prepare his cases properly. This is because the majority are settled without suit, or when called are so frequently continued from time to time that he finds it fairly safe to take a chance of waiting until the trial or reference is on before going into the details of the accounts upon which he purposes to examine the accountant.

This makes it all the more necessary for the accountant to be ready. Unfortunately, the lawyer's excuses are received with less annoyance than the accountant's, and the latter must be ready to go into any or all phases of the matter on a moment's notice, or the lawyer, and through him the client, become impatient.

The section on working papers[2] should be read at this point. Failure to make full and proper memoranda during the examination is as annoying subsequently as the failure to find data required, either because it is not properly arranged or filed, or because the query raised was not foreseen.

---

[2] See page 47.

2. A Witness Can Testify to His Own Work Only.—While an expert witness is permitted to present synopses and summaries prepared from records offered in evidence, and is thus not compelled to produce his results item by item, yet he must testify that the results to which he testifies are his own preparation and not the work of others. The state of mind of the presiding judge usually decides this point when there is any dispute.

The author has found it valuable to have ready for inspection certain of the working papers written in his own handwriting. The attorney for the other side almost invariably raises this point when he thinks there is any likelihood of any of the work having been performed by others, and when the witness has a large practice, and is thought to be dependent largely on the work of assistants, or when the report indicates that one man could not possibly have compiled all of the data within a limited period of time. It is of the utmost importance, therefore, that the witness should be ready to state that the results to which he is testifying are his own work; that he brought the figures together; that if he did not perform all of the detail work, it was done under his supervision, and that he presents it as his work. Experienced judges accept this explanation and permit accountants to testify as to the accuracy of work done by assistants.

3. Information Should Not Be Volunteered.—As an accountant is supposed to testify to facts only, he makes the best impression when he answers questions explicitly and stops when he thinks the questions have been answered.

If the attorney is not fully conversant with the details of the case, the accountant should, before the hearing or trial commences, prepare for the attorney written questions designed to bring out all of the matter favorable to his client's side of the case.

The auditor should never be asked to suppress facts within his knowledge, and cannot honestly do so, no matter how much

pressure is brought to bear, but no code of ethics recommends, or as a matter of fact permits, a professional man to volunteer to outsiders, or to the opposing side in litigation, facts which would injure his client.

The accountant having, as a part of his duty, provided the means whereby favorable facts will be disclosed, must in every legitimate way guard against the disclosure of unfavorable facts. As intimated above, he must answer any pertinent question, no matter how much the answer may hurt his client; but if there is any possibility of such a question, in cross-examination, being irrelevant, or improper, he should give his own attorney plenty of time to object before replying, and if he is instructed to answer, his duty lies solely in telling the truth, and there should be no volunteering of information for which the question does not specifically call.

4. Conclusions and Opinions.—Practitioners differ as to how far an accountant is justified in testifying as to his opinions when the facts at hand may not be conclusive enough for him to state positively that his testimony is founded on conclusions based solely on facts and figures contained in the records offered in evidence.

Frequently the records are incomplete, but enough data may have been compiled to warrant a definite opinion as to certain results. When the witness is acting in good faith, and is interested only in seeing that, as far as he is concerned, substantial justice is being done, it may be urged that his duty to his client requires the presentation of all the evidence possible, and that the other side can be depended upon to object to anything going in unless the ground work of relevancy has been laid.

On the other hand, it is contended that an accountant, as a witness, should be absolutely impartial and disinterested, that he should state the bare truth and be oblivious of which side it might affect. The author has heard this argument for many years, but in the course of his experience which has brought him into

contact, on one side or the other, with the leading accountants in this country, he has invariably found that the accountants are more or less interested in their side and the presentation of the facts favorable to their side, and he has failed to detect any signs of pure disinterestedness on the part of any one of them.

Furthermore, he has found in many instances that the accountants have been better advocates for their clients than the attorneys themselves, this being demonstrated not only by their testimony under oath, but by their skill in suggesting questions to the attorneys, and these questions have been directed to all witnesses, and not to those only who are examined on the accounts.

To sum up: the present practice seems to be for accountants to promote in all legitimate ways the success of the side of litigation on which they are retained, and they are not found to be unconcerned and oblivious of results; that the attorneys and parties to the cases know that this is the practice; that they are relying more and more on professional auditors to assist in the preparation of matters in litigation; and that the attorneys and others who have a first-hand knowledge of the present practice do not see any impropriety in it.

The author has no criticism to make of this procedure, but on the contrary believes that the accountants who have in many cases signally helped their clients by extra zeal would have fallen short of their full duty if they had maintained the attitude of a machine which shows final results, but which cannot make suggestions as to how those results may be used.

ON SALE OR PURCHASE OF A BUSINESS

The professional auditor is now being consulted frequently by the man who wishes to sell as well as the man who wishes to buy. The former realizes that the services of an independent auditor are of the utmost value to him in stating the ramifications of his business so clearly that he will not omit any favorable aspects in

dealing with a prospective purchaser. Likewise, the buyer feels that he cannot afford to depend on the representations of the seller or on his own judgment. One may pay too high a price and the other may sell at too low a price unless the professional auditor passes upon the proposition.

It is generally recognized by leading accountants that when an auditor represents a prospective purchaser, much that is necessary in an ordinary audit may be omitted. It is safe and legitimate to assume that the seller will not underestimate his profits, or his assets, and that he will not overstate his liabilities.

Briefly stated, if the auditor finds actual net earnings and assets equaling the representations, and no more liabilities than are claimed, he need not spend unnecessary time on an inspection of the expense vouchers and similar work.

The chief points of difference which may arise between an investigation of this kind and an audit, are the following:

(a) Something more than figures wanted.
(b) Period covered.
(c) Analysis of earnings and expenses.
(d) Future requirements and economies.
(e) System of accounts.
(f) Elimination of unusual items.
(g) Adjustments and qualifications.
(h) Errors in the books.
(i) Investigation on behalf of a retiring partner when the business is being sold to a continuing partner.
(j) Investigation for those in charge of reorganizations.

(a) Requirements

These will be discussed in order.

Something More Than Figures Wanted.—The prospective purchaser of a business wants to know as much of its past history as a man does of the past history of his prospective

bride. He usually contemplates joining fortunes for an indefinite period, and his associations must represent more than mere financial gain. Who is better equipped to pass on the enterprise from almost every point of view than an experienced auditor?

Most accountants feel that their full duty has been discharged when they submit a balance sheet and an income statement, together with such comments thereon as modify the figures submitted. Outside of these figures they will not go, on the theory that to do so would mean a departure from facts into the realm of theory.

Nothing could be more inconsistent! The figures shown are, with very few exceptions, estimates only. The stock-in-trade is always worth something more or less than the inventory valuation. The fixed assets vary in value to such an extent that book valuations are usually shown because actual values are unknown. The accounts receivable are valued on past experience, which may be deceptive. There may be contingent liabilities of large amount unknown and not provided for. Therefore, certain conclusions as to the conduct of the business, the trend of prices, and other general information may be compiled by the auditor and reported upon with about as much dependability as the accounts.

What does a prospective purchaser want? It is not enough that the report of the auditor, the appraiser, or the engineer show that the assets, as represented, are in existence or that the earnings equal the guaranteed estimates. It is of quite as much importance to be assured that the management as it existed at the time of the examination was all that could be desired. Assets are sometimes accumulated and earnings realized through cumulative circumstances which are no longer a factor, or under the administration of men no longer connected with the enterprise.

In the United States, new industries or special and ingenious processes may have been responsible for large profits which sub-

sequently become reduced through the natural economic law of competition and imitation. Capital flows to unusually profitable enterprises as surely as water finds its level.

CONTINGENCIES.—Suppose the business under investigation has shown unusual profits up to the date of the last balance sheet. Is the auditor charged with the duty of forecasting a probable change? Perhaps not, but many enterprises have failed to maintain past profits, although the latter have been actual, and the auditor's certificates thereto true in all respects. In some cases bankruptcy has resulted within a year after the flotation of a stock or bond issue, due entirely to a drop in gross profits caused by competition, the removal of tariff protection, compulsory reduction in rates by public authority or private demand, or reckless or fraudulent practices.

The auditor is not and would not be held responsible for losses arising out of these contingencies, but if the downward movement were starting during the course of his examination, should he not convey his impressions to his client? It may be said that a prospective purchaser should think of these things himself. Perhaps he should, but he doesn't. The author has followed this line of suggestion more or less for some years, and has found that the comments are well received and always appreciated, even though his advice may not always be followed.

STATISTICS.—An auditor who expects to perform a considerable amount of investigating in the course of his practice will find it very useful to compile statistics of various businesses. This may seem to be a formidable undertaking, but it may not be. It so happens that the proprietors of a business will hear that a certain auditor has just completed an examination of the books of someone in the same line as themselves. They feel that he has acquired special knowledge relative to methods, etc., which may be beneficial to them. It should be remarked in passing that only in the rarest cases has an auditor been asked to reveal

any confidential information which he has secured from a competitor.

But the auditor may for his own information compile statistics as to what a certain kind of business should earn, and what its expenses and costs should be. Without revealing the source of his information, he may be able to offer constructive suggestions or, in the case of a purchase or sale, or other investigation, he may be able to comment more intelligently on the accounts than if he were dependent entirely on the data compiled in each particular case.

Status of Accounts.—There is another line of investigation which is not often reflected in a report: Are the accounts to which the auditor certifies, prepared directly from the current books of account, or are they the result of special compilation? If the latter, is the actual state of the books an indication of neglect or ignorance? Have the proprietors kept themselves informed as to the results of operations through monthly or other frequent periodical statements, or have they waited for definite results until the end of their fiscal year, when an inventory is taken?

Have they, therefore, been dependent entirely upon intuitive knowledge, which is possessed more or less (chiefly less) by executives who scorn theory and accounts, and who boast of the value of practical experience? Are the departments co-ordinated, or do they run independently to such an extent that one does not know what the other is doing? Is it a fact that certain departments are a law unto themselves, that they run along and write up copious records which are never used by those to whom they might be supposed to be of value?

Conclusion.—All of these queries and many more might be answered offhand by an auditor who had completed an investigation into assets, liabilities, and earnings, but he could not properly report thereon unless he had been in contact with every

department of the business. Having this information, why should he not report thereon orally or in writing?

All these suggestions have a bearing on the two thoughts which are uppermost in the mind of a prospective purchaser, viz.: "Taking everything into consideration, is the business a desirable acquisition?" and "How much is it worth?" The auditor may not wish to give a definite answer to either question, but he can furnish figures and other information which are of the utmost interest.

The auditor should insist that at least a summary of the financial statement should be published in a prospectus when the accountant's name is given therein. Several instances have come to the author's attention where statements made by the bankers differed materially from those furnished by the accountants. In one case, the accountants were forced to defend themselves in one of the financial papers by repudiating the information published by the bankers.

(b) Period Covered

As stated at the commencement of this chapter, the auditor should require definite instructions before starting an investigation. These instructions usually specify the period to be covered. As a prospective purchaser wishes to know absolutely all that is possible about the past, it is usual to verify the earnings for as many years back as time permits. Three years is a minimum, while ten years is not too long a period for those who expect to make a permanent investment.

As will be pointed out later, it is not necessary to audit the accounts in the usual sense. An analysis is all that is required. Therefore, it is very little more work to cover six years than three, unless, of course, the records for past years are incomplete or inaccurate. The longer the period, the more accurately will the trend of the business be shown. Most enterprises have good and poor years, and the respective recurrence of these is of great interest.

In no event should the results of two or more years be lumped. A big year and a small year may make a satisfactory average, but few wish to invest in a business where the small year is the last. Therefore, each year must be shown separately, and averages never used unless the actual results of the last year or two are equal to the average.

The auditor must not fail to inspect the results between the date of the balance sheet and the time of the examination. The most recent month should be compared with the same month for previous years, and if an unfavorable result is shown, the fact should be reported.

(c) Analysis of Earnings and Expenses

GROSS INCOME.—In an audit it is always important to verify the gross income. In many investigations the prospective purchaser is greatly interested therein and is almost indifferent with respect to the net income. He says that with his own appraisement of the physical property, and a personal knowledge of local conditions, he requires nothing additional except an accurate statement of the gross receipts or earnings of the enterprise in order to determine upon the price he is willing to pay for the property. The reason is that an experienced executive knows, or thinks he knows, the proper ratio of operating expenses which will be incurred under proper management, and it is of little moment to him how much the old management has expended.

This procedure is followed in connection with the sale of public utility companies oftener than with any other class. The sales or output of these companies are, of course, more nearly constant and dependable than with trading or manufacturing enterprises. But capable men in nearly all lines are found willing to invest in a business with which they are familiar, and, if reasonably assured of a minimum of gross income, will undertake to guarantee a maximum of operating cost, irrespective of what the previous owner may have done.

If a purchaser is chiefly interested in gross income, the auditor should take great care to state the earnings properly, looking carefully into the sources of revenue, comparing one period with another, and noting any deductions therefrom in the shape of trade discounts, returns, allowances, etc. The latter should be deducted from the gross income and not be included among the expenses. He should then state the expenses and costs as shown by the books and make only such verification as may be required.

NET INCOME.—On the other hand, if a prospective purchaser does not have any preconceived ideas as to the proper relation between gross and net income, the auditor should make his examination exhaustive enough to enable him to prepare and submit full and complete analyses of expenses as well as earnings.

The comparative statements of gross income afford profitable data relating to the progress of the enterprise. Of all businesses in which a purchaser is interested, the one with a stable earning power and small but sure net income is preferred to the one whose income fluctuates violently. Many business men manufacturing a novelty, or working under patents, have an unusually prosperous year due to lack of competition or some similar cause. They immediately talk of incorporating or reincorporating on the basis of the one year's net income, and commence to spend money as if it were an annuity instead of the returns from an exceptional year.

The auditor who is consulted in such a case does his client a kindness if he points out the wisdom of waiting until he can show a good three- or five-year average before he is justified in considering his business as on a stable basis, and one in which others will care to invest. Fluctuations must be noted and explained. Gross income depends largely on general business conditions; costs and expenses also vary.

It is necessary to obtain an analysis of the accounts and be able to report the various stages from gross income to net income.

In a trading business, for instance, the following form of statement brings out the information which a prospective purchaser requires:

A. B. COMPANY

COMPARATIVE INCOME STATEMENT

For three years ended.....19.....

	Years Ended					
		%		%		%
Gross Sales	$		$		$	
Less: Returns & Allowances						
Net Sales						
Inventory, beginning of period						
Purchases, net						
Less: Inventory, end of period						
Cost of Sales						
Gross Profit						
Ratio to Sales						
Ratio to Cost						
Selling Expenses:						
Salesmen's Salaries						
Salesmen's Expenses						
Commissions						
Advertising						
Catalogues						
Delivery Expense						
Total Selling Expense						
Ratio to Sales						

Red ink should be used when the figures are not responsive. For example, when expenses and costs exceed gross income and the figures opposite "net income" are in red, no further explanation is necessary to show that the result is a deficit rather than net income.

COMPARATIVE INCOME STATEMENT—*Continued*

	Years Ended					
		%		%		%
Administrative and General Expense:	$		$		$	
Executive Salaries						
Office Salaries						
Office Expenses						
Stationery and Office Supplies						
Telephone & Telegraph						
Postage						
Traveling Expenses						
Legal Expenses						
Rent						
Insurance						
Light, Heat and Power						
Building Repairs & Maintenance						
Depreciation						
Miscellaneous						
Total Adm. & Gen'l Expenses						
Ratio to Sales						
Total Expenses						
Net Operating Income						
Other Income:						
Income from Investments						
Interest on Notes Receivable, etc.						
Deductions from Income:						
Interest on Bonded Debt						
Interest on Notes Payable						
Total Deductions						
Net Income						
Add Extraordinary Credits						
Deduct Extraordinary Charges						
Surplus or Deficit for period						

It will be noted that the ratios shown (expressed in percentages) are gross income to sales, gross income to cost, selling expenses to sales, administration and other expenses to sales. As an investigation implies a comparison of two or more years, these percentages are of more value, relatively, than the amounts. The net income for each year being shown, the next most important thing is to know how it was made. If the sales were about the same for two successive years, the variations in the percentages of expenses are most interesting, and to a prospective purchaser it may be a deciding factor to learn that while the selling expenses increased, the administration expenses decreased.

VERIFICATION OF SALES.—It is assumed that all sales except of recent date will be verified otherwise than through the sales records. That is, after being charged to the personal accounts of customers, if overdue they should be handled as doubtful accounts.

Since it is customary to accept recent sales as collectible, it is necessary for the auditor to satisfy himself that they are bona fide and not manipulated to produce a good showing just before the date of the balance sheet.

The more common forms of manipulation are:

1. Inclusion of goods sent on consignment and approval as completed sales. This practice may result from ignorance, rather than fraudulent intent.

2. Sales or earnings may have been unduly inflated by charging out wholly fictitious quantities and amounts. When the earnings arise from cash sales, the amount by which the earnings are to be increased is arbitrarily added to the daily receipts. At least one instance is known of the improper increase of street railway fares by a promoter who planned ahead to sell out. He knew that the purchase price would be calculated on a certain number of times the net income realized, or be based on the gross income of the most recent period.

It will be seen that if the good-will of a property were to be

sold on a basis of four times the average net earnings for the last two years, any method of increasing such earnings would at least double the cost thereof, i.e., the addition to cash sales of each $100 would be divided by two to get the average for two years, and then multiplied by four to arrive at the purchase price, thus yielding a profit of at least 100 per cent for the fraudulent practice.

A scheme of this nature must necessarily be planned ahead, which does not apply to most manipulations. This makes it extremely difficult to detect, and no general test can be devised which will surely uncover the fraud. The auditor who keeps constantly before him the possibility of fraud designed to inflate the earnings, has the best chance of discovering it.

If the legitimate cash sales or receipts are small, no one would be bold enough to inflate them to any considerable extent. Therefore, the most feasible method is to enter among the bona fide sales fictitious names, quantities, and amounts. This fraud will be disclosed to the auditor who investigates the average number of new customers' accounts opened within a given period. Any unusual increase is worth while looking into in any event. If legitimate, the question of a continuation thereof is important; if not legitimate, it is even more important to uncover the irregularity.

If there has been an increase in prices shortly before the date of the balance sheet, the cause thereof should be investigated. Such increases are not always maintained, and it is unsafe to depend thereon unless the most positive evidence can be secured of the propriety and wisdom of the change.

It may also have been the case that special contracts have been undertaken which have realized large net income but which may never be repeated. For instance, a small steam railway company reaped the advantage of a military encampment during a considerable part of one summer. The increase over its normal traffic was enormous. Yet a prospective purchaser has no assurance whatever of a repetition of such earnings.

The period after the closing date up to the time of the investigation must be scanned closely for rebates, allowances, and returns, to see if they constitute deductions from prior sales. Likewise, the subsequent sales should be inspected, particularly if suspiciously small, as this may indicate that shipments after the closing date were carried back and charged under false dates.

It is not sufficient to be informed that the outstandings have been guaranteed by the vendors, making a valuation unnecessary. It may be that fictitious sales have been entered in order to make a good showing, the vendors calculating that they can well afford to stand the apparent losses arising out of the non-collection of such items. The auditor should keep this possibility in mind, and if the vendors or guarantors make good any considerable amount in this respect, the details of the accounts should be inquired into.

THE TURNOVER.—Authorities differ greatly as to what this term means. The dictionary definitions are: "A completed commercial transaction"; "The money receipts of a business for a given period."

The merchant who speaks of his "turnover" usually refers to his gross sales, but if his answer were analyzed it would be found that his reference is rather to his stock of goods than to the sales value thereof. If he starts his fiscal year with a certain inventory, he endeavors to "turn it over" several times during the year. In this case it means the cost of the sales, because his inventory and subsequent purchases are entered at cost, and it is this stock that he is endeavoring to turn over to the greatest possible advantage.

The banker does not look with favor on the borrower whose gross sales are not several times as much as his starting inventory, and it is a fair inference that sales and cost of sales are here used interchangeably.

Uniformity is desirable in accountancy terminology, so the author suggests this definition: The turnover of a merchant or

manufacturer represents the number of times his capital in the form of stock-in-trade is reinvested in stock-in-trade during a given period.

To ascertain the turnover, take the starting inventory, add the purchases or cost of manufactured goods, and deduct the inventory at the end; divide the total by the starting inventory. The calculations are based upon a normal inventory. The result is the number of times the capital invested in stock-in-trade has been turned over during the period. In the event that the value of the inventory throughout the year varies considerably, or in case of a continuous increase or decrease in the volume of business which might have a corresponding effect on the inventories, a more accurate method of determining the turnover would be to use the average inventory instead of the starting inventory.

The capital invested in the stock and the physical stock itself may be used synonymously in referring to the "turnover" of a business.

Profits on Fluctuations.—Many enterprises using staple raw materials frequently buy their requirements in advance, and in numerous instances have found it more profitable to sell their entire stock on a rapidly advancing market than to operate their mills. This occurs oftener with cotton than with any other commodity, but the practice obtains in other lines, such as grain, pork, copper, etc.

If such profits are actually realized, they should appear as a special item in the current income account. If the transactions have resulted in a net loss, it also should appear as a special item in the current accounts, inasmuch as it must be paid out of current net income.

Decrease in Expenses.—The expenses of all classes should be compared for a number of years. If there has been any considerable decrease during the period shortly before the balance sheet date, a careful analysis should be made to

determine the possibility of the omission of liabilities which have been incurred but the entry and payment thereof postponed.

The auditor must look at all expense payments after the closing of the books; if unduly large, the vouchers should be examined and their dates noted, as some of them may be for expenses incurred prior to the close of the fiscal period.

Advertising and Other Deferred Charges.—Excessive valuations are frequently placed upon the prospective earning power of advertising and other forms of exploitation. In the publishing business, for instance, it has been considered permissible to capitalize the expenses of establishing a magazine. There is neither possibility nor expectation of recouping the preliminary expenses out of the earnings of the first year or two. If successful, the early advertising, etc., is justified and should be charged against the years which reap the benefit.

In practice, however, the result is not ideal. Many periodicals have incurred large preliminary expenses, and capitalized them, but have never been able to charge off any part thereof against earnings. Other publications which have shown a loss in their early years because no deferred charges were carried over, have realized large enough profits in subsequent years to recoup all the preliminary expenses.

At best, it is a difficult matter to settle but it is doubly hard for a prospective purchaser. The best advice to give is to suggest that if the business has been running for some time, all such charges, unless very recent, should have been absorbed, and that if too recent to forecast the result, the purchase of the prospective profits arising therefrom is a pure gamble, modified perhaps by evidence, if available, of what similar advertising expenditure has produced in the past. An English prospectus contained the certificate of a chartered accountant as to profits realized over a period of years "before charging interest, management salaries, and advertising."

LEASES.—If the concern under investigation does not own the land and buildings in which its business is transacted, the matter of the lease and renewals thereof is of the utmost importance. It is safe to estimate that out of 100 leases for a long term, or which provide for extensions, more than 75 per cent call for a higher rental during the later years than at the beginning of the term. If the renewal rate is not fixed, it usually is to be based on an appraisal, and in perhaps every case it is contemplated by owner and lessee that the future rental to be fixed on such appraisal will be higher as a result thereof.

Therefore, the prospective purchaser must ascertain definitely whether he can retain the same premises for a reasonable time, if he so decides, and whether the prospects for an increased business or other equivalents will compensate for the increased expense if a long lease is desired. Conversely, a prospective purchaser may not be willing to buy the business unless it can be removed economically to a new location. In such a case a long lease may in itself prevent the consummation of the deal.

Strange as it may seem, prospective purchasers do not always think of these matters during the early stages of negotiations. The auditor should ascertain the precise state of affairs with respect to the lease before he enters upon an investigation of earnings, the result of which would have no interest for a purchaser who may not otherwise know that a long lease on an ascending scale could not be disposed of.

In other cases, a purchaser may be negotiating for several properties with the intention of consolidating them. It may be part of his plans to unite them all in one place. Obviously the terms of the leases, if any, are of extreme importance.

Sometimes mergers are effected, and plants consolidated, leaving certain plants idle. If the plans of the promoters contemplate leasing the idle plants at a remunerative rate, or leave out of consideration the continuation of the payment of rentals which cannot be evaded, a serious difference between estimated and actual profits may ensue.

In conclusion, it cannot be stated too strongly that the location of a business may determine its success or failure, and any facts or opinions relative thereto which the auditor can furnish are of the greatest interest to his client.

INVENTORIES.—In an investigation for a prospective purchaser the question of inventories is one of the most important. Little need be added to the discussion of this subject in Chapter VIII and IX, except that the distinction must be especially noted between valuations properly incident to a going business and those which apply in case of the purchase of a business.

Naturally and properly, the purchaser wishes to buy as cheaply as possible, and the seller desires to realize as high a price as he can secure. But in representing one or the other, the auditor cannot allow any such considerations to affect his mind in arriving at the net income. The latter should be the same, whether prepared for a vendor or a vendee.

Inventories vitally affect the income account, and the goodwill of a business rests upon the net income realized. The result is that inventories actually fix or materially control the purchase price of the business, because the overstatement of an inventory results in an overstatement of net income.

An auditor need not, and as a matter of fact he cannot, be entirely indifferent to the interests of his client. If he represents a purchaser, it is almost certain that the seller has stated the inventories at the highest possible price, so that he need not be particularly concerned about not doing justice to him.

Obviously, a purchaser does not wish to acquire "souvenirs" illustrative of former unsuccessful sales campaigns, no matter how willing the vendor may be to part with them. With this thought in mind the auditor should be able to analyze the inventory for the purpose of disclosing unsalable goods.

The experienced auditor should prepare a report the accuracy of which he can maintain before conflicting interests if misunder-

standings arise, as is often the case when commercial enterprises change hands.

Other Factors Which Affect Earnings.—Inasmuch as all of the items of assets and liabilities, as well as all sources of income and every class of expenses, enter into the final adjustment of the income account, the auditor should not pass finally upon the amount of net income or deficit, to which he must certify, unless he has covered, or intentionally left untouched, all of the procedure required in a balance sheet audit. The practitioner who does not have his own program for an investigation is therefore referred to the chapters of this book describing a balance sheet audit.

(d) Future Requirements and Economies

An Auditor Should Not Prophesy.—The author has taken the position that an auditor is bound to furnish his client all of the information bearing on the investigation or audit which he believes to be reliable and relevant, and that he is by no means limited to the figures which any intelligent bookkeeper might compile.

But it must be understood most positively that it is never permissible for an auditor, as such, to certify to future earnings or future results. An auditor can express his opinion as to the effect particular transactions will have if applied to a future date. For instance, an auditor would be justified in stating that if a million dollars of bonds were sold at par, the bank account would be increased by the same amount. But an auditor would not be justified in stating over his signature that if a million dollars of bonds were sold at par and invested in the business, savings would result sufficient to net additional net income. This would be pure surmise, for unexpected losses or expenses might more than offset the savings, or the additional capital might be lost entirely through errors of judgment in its expenditure.

Business men and financiers frequently ask their auditors to calculate the effect certain changes will have on the results of operations. For instance, an auditor is asked to prepare a state-

ment showing the probable outcome if gross sales are doubled, with no proportionate increase in fixed charges. This is proper, profitable, and pleasing work for a public accountant, and he should welcome the engagement, but it must be distinctly understood, before the work commences and after it is finished, that his work is performed in the capacity of an accountant and not that of an auditor. He should refrain from submitting his estimates on paper which bears his name at the top or the bottom, otherwise there is a risk of the figures being put forth as if they were certified to.

Great pressure is sometimes brought to bear on auditors to have them certify to what are in reality only estimates. It is an astonishing fact that certificates have been issued which are so worded that the untrained mind reads therein that the auditor is satisfied that if certain additional capital is raised, or something of that kind, there will be sufficient earnings to pay a large return thereon. The auditor who lends his name to such near-fraud should be expelled from any accounting body to which he may belong.

There are a number of matters which affect the future upon which an auditor may and should give his opinion, and he may and should discuss the relation which such matters have to the past, but in no case should these be grouped in such a way that there can be read into the opinion a conclusion as to the future net income of an enterprise. The author believes that this is the best test to apply when in doubt as to how far an auditor should go in furnishing information.

Insufficient Capital.—For instance, a business may have had insufficient working capital, and advantage may not have been taken of discounts. A prospective purchaser may ask that a report be compiled which assumes adequate cash capital. An analysis of past purchases may definitely fix the saving which would have been made, but the point at issue is whether or not a like saving can be realized in the future.

If an auditor is asked to prepare a statement setting forth the past results and then stating that in his opinion the following period will produce a given result, assuming the saving of discounts, he is going far beyond his province. But if in his opinion the discounts will continue, or some equivalent thereof, there can be no valid objection to his stating in a certificate that, assuming ample capital and the same volume of business, there will be one item of saving, mentioning the amount.

There may be other undue expenses or losses due to insufficient capital, but most of the arguments advanced as to what would have been accomplished are fallacies.

Naturally a prospective purchaser wants to know wherein economies can be effected or net income increased, and evidence may be available to prove the truth of the representations made. The most common claim is that the output has been too small, and that additional facilities would have meant greatly increased net income. Output, however, must be sold to produce a profit, and it is always easier to talk about a big increase in sales than to secure actual orders. Men who are partially successful frequently overestimate the buying capacity for what they sell. The market may readily consume all that is offered, but if the offerings were to double, the sales price of the whole might be reduced to an unprofitable basis.

Large capital is by no means a guarantee of financial success, and any investigation into the capital required for a particular business, the effect of a lack of it in the past, and the possible returns therefrom in the future, calls for more acumen and general business knowledge than most men possess. Nevertheless, there are times when an auditor can be of substantial aid in such an investigation, and there can be no objection to his placing at the disposal of his client the benefit of his experience; but for his own sake he must not permit the publication of a certificate which can be directly or indirectly interpreted as a statement of future results.

Comments on future requirements should always be accom-

panied by a statement of the average net capital employed in the old business. This affords an opportunity for a prospective purchaser to arrange for additional capital if the old is inadequate.

Economies Exaggerated.—One has but to read some of the glowing prospectuses issued during 1919 and 1920 to appreciate the difference between expectation and realization. Fortunately, not much of the responsibility for the failure of many large enterprises can be traced to auditors, but a part of the blame sometimes rests on their shoulders.

It has been stated in these pages that an accountant should be available to make calculations and compile data, for which others must take the responsibility. This is true, but no public accountant should ever work in the capacity of a clerk. He may assist in the preparation of a statement which purports to show the economies to be effected by a merger of two or more concerns, but if, through ignorance or lack of experience, estimates are made which the accountant knows cannot be fulfilled, he should not hesitate to express his convictions, and if it appears that facts are to be ignored and the public deceived, he should withdraw in order to avoid any possible connection with the enterprise.

Almost without exception promoters have, or seem to have, visions of two or more plants being conducted on about the same expense ratio as the most economical of those merged. Economies in all departments are prophesied, and as a matter of fact many are possible and are effected. But they are sorely needed to offset the extraordinary expenses and extravagances which seem to be a necessary element in the promotion and establishment of all such consolidations.

To start with, vast sums are paid in cash or securities to promoters, attorneys, and insiders. Then engineers and accountants must receive large fees, although far less in proportion than those paid the lawyers.

The bankers, lawyers, and others who become members of the board would not think of attending a board meeting at the

dingy business offices of one of the old concerns, so a large and expensive suite of offices is secured "downtown." With expensive offices go expensive clerks, and so on down the line. How many poorly paid clerks and others must be dismissed at the works to pay a fractional part of the new and additional expenses which were not referred to in the prospectus?

If anyone thinks this description is an exaggeration, let him examine the literature and subsequent record of a few of the popular consolidations.

FORMER OWNERS' ATTITUDE.—Except in rare cases, the business which changes hands or consolidates with others has been prosperous. It is conceded that the personal element is the most important factor in business life, so that if the personal attention of the former proprietor is not available after the sale takes place, it is absolutely essential that an equivalent be found, or the success of former years will not be duplicated.

This is another of the matters with which an auditor is not usually concerned, but no one has a better opportunity to observe the relative position of each person responsible for the former prosperity than the auditor who investigates the finances of the business for a series of years. If the examination makes it apparent that one or more of the proprietors, managers, or other officials were dominant in its affairs, there can be no reasonable objection to this fact being communicated to the prospective purchaser.

Many men think that ordinary ability, coupled with plenty of money, can win success in almost any line of business, but this is not true, as may be proved beyond a doubt by examining for a while the bankruptcy announcements. Many concerns which start in business with ample capital fail because they are not properly managed. Other concerns with less capital, doing precisely the same kind of business, during the same period of time, realize large profits.

One of the most striking instances is that of the wholesale

grocery business. Here conditions are nearly equal. The same kinds of goods are bought and sold. The same customers are available to all, yet in the same city one concern earns large net income, while another doing a large business does not earn a dollar of net income. It is due to the personnel of the management, and, where successful executives can be retained, an auditor is not exceeding his duty if he comments on the matter.

Competition.—Some business men wish to expand, or consolidate, or do something else that sounds big just as soon as they have had one big year. It usually happens that the extraordinary income earned has been due to a monopoly of a certain kind of product. Now economic laws adjust an inordinate profit by stimulating competition. Publicity which follows a sale or the publication of results will, of course, spread the knowledge of large net income.

An exception may be noted in the case of patented articles, where the continuance of a monopoly is protected by law. But where there are no patents of vital importance, the question of competition must be seriously considered.

Another element which affects competition is the personal attention referred to in the preceding section. If the business deals in any goods which are dependent upon the taste of the public, it must be borne in mind that the public is very fickle. Popular demand may be increased by advertising or maintained more or less by fair dealing and courteous treatment, but no one can foretell what the future will develop in the way of competition. For this reason a prospective purchaser must think deeply before he commits himself to a proposition, which, to yield a satisfactory return upon the purchase price, must continue to earn such a large gross income that an endeavor is made to keep the facts secret.

How long the operation of an economic law can be suspended is for the purchaser to decide.

(e) System of Accounts

Criticisms Should Be Postponed.—In special investigations such as are here discussed, the auditor should never express an opinion as to the condition of the accounts, except in a confidential report to the prospective purchaser. During the course of the work he must accept things as he finds them, and, in order to secure the sympathy or co-operation of the office staff, he must be careful to praise anything which deserves praise, and refrain as much as possible from criticizing accounts or methods which cannot be approved.

When the purchase is consummated and the auditor is requested to submit suggestions and criticisms, then his working papers should disclose full information available for use.

Condition of Accounts an Index to Proprietors.—There are some particularly shrewd bankers who make frequent purchases of properties and in other cases furnish capital, who consider that an auditor's report on the condition of the accounts reflects very accurately the kind of men who have been running the business.

If net income has been large and no accounts worthy of the name have been kept, it is apparent that these men have depended upon their own ability to earn money, and, since this cannot be sold and transferred very readily, it is not a safe plan to continue such incomplete records.

Preparation for New System.—Therefore, in their contracts the bankers sometimes insert stipulations along the following lines:

1. That within sixty days after the formation of the new company, public accountants satisfactory to the purchasers shall be employed to devise and install a modern system of accounts for the company which will permit of full and accurate reports of its operations and its financial condition being made at least monthly. (In many cases this provision is objected to, but bankers are anxious to have the accounts reorganized wherever

dependable results are not readily available, and therefore hesitate to finance a company whose accounts are unsatisfactory.)

2. That said accountants shall be furnished all requisite information and facilities for carrying into effect such changes as may be necessary, and that the officers and employees of said new company shall co-operate with the accountants in the installation and completion of the new system within a reasonable time, which in no event shall exceed twelve months from the date hereof.

3. That the reports contemplated by said proposed new system shall be delivered each month to the board of directors of the new company, one copy thereof to remain on file with the secretary of the company, subject to the inspection of any member of the board, and one copy thereof to be mailed each month to the purchasers, as long as the (preferred) stock is not retired.

4. That in the event of accountants being employed for the purposes heretofore stated, then the said accountants shall be retained to audit the accounts of the new company at least annually. If the system in use is satisfactory and accountants are not required immediately, they shall in any event be retained to audit the accounts at least annually; copies of their report to be delivered and filed as set forth in paragraph 3.

5. If vendors do not name accountants satisfactory to purchasers, the latter may nominate and the vendors agree to employ accountants so nominated and to carry out the provisions referring to accountants with the same effect as if said accountants were appointed by the vendors.

(f) Elimination of Unusual Items

It is a dangerous practice to eliminate items solely because they appear to be extraordinary. It is safe to say that no business has ever been free from unexpected losses and expenses. Nevertheless the auditor is expected to state separately all important items which on their face are extraordinary.

EARNINGS.—A purchaser profits from future business only. Large special earnings may have been made in the past, but his interest lies in the possible net income of the future. Necessarily this is based largely on past experience, but if there are items which probably will not appear under subsequent conditions, they must be eliminated from that part of the report upon which his opinion whether or not to buy will be formed.

INCOME FROM ASSETS NOT TAKEN OVER.—The auditor, in order to make an intelligent report, must have a copy of the purchase contract or option. In many cases there are items which appear on the books which are not included in the purchase price and which are to be retained by the vendor. It is important to ascertain whether any income from assets of this nature has been included in the current earnings.

INTEREST ON DEPOSITS.—If the bank balances have been normal, any interest thereon should not be eliminated unless it is known that the future bank accounts are not to bear interest. Some firms carry many hundreds of thousands of dollars on deposit all the time, earning, perhaps, 2 or 2½ per cent, just because they always want to be ready for an emergency. It is not likely that anyone buying such a business contemplates the same practice.

SALE OF ASSETS.—The analysis of earnings discloses whether anything has been included which represents profit on the sale of a portion of the capital assets. For instance, an old building or some land may be sold at an advance over the book value. This is clearly an extraordinary profit and must not be included among the earnings.

The author was called upon to verify the earnings of a concern and found that among the current earnings were profits on the purchase and sale of the company's own preferred stock.

APPRECIATION OF ASSETS.—It is a common error to assume that an appreciation in the value of land or any other fixed asset can offset the depreciation of plant.

If a statement of earnings has been prepared from the books, and an appraisal shows that the assets are equal to the book value, but that the land has appreciated in value $100,000 while the machinery has depreciated $100,000, then the amount of appreciation must be eliminated and treated as extraordinary income, and the depreciation included among the expenses and deducted from income.

Insurance Profit.—If a fire has occurred, it may be found that the books show that a profit has been realized. This usually occurs where book values have been written down to be conservative, but the insurance has been left undisturbed. As the assured is entitled to recover the sound or replaceable value of his property, he may be collecting for obsolete or abandoned machinery, etc. In such case, since the prospective purchaser, in order to be conservative, will follow the same system of charging off, and cannot depend on a fire, the apparent profit cannot be included among the current earnings.

Damages for Change of Grade, etc.—Other extraordinary receipts may arise out of damages collected from compulsory change of grade, a portion of the premises being condemned for municipal or public utility use, etc. These are all unusual items and are not apt to recur in the same business, so they cannot be included among current earnings.

Expenses.—There may have been special losses or expenses which the prospective purchaser can, or thinks he can, avoid. These, too, must be separately stated.

Excessive Reserves.—Just as some men decline to allow for known losses, such as bad debts, depreciation, etc., others insist on writing off all of their furniture and fixtures and create excessive reserves for other wasting assets.

Since the passage of the federal income tax law, some corporations have entered excessive depreciation in their books. Upon a sale they would hardly admit that such charges were proper

deductions from income, and if the auditor finds that they are excessive, he will adjust the accounts accordingly.

The auditor should endeavor to have the reserves represent actual depreciation or prospective losses. When they go beyond this they are in reality part of the surplus and are to be so treated.

EMBEZZLEMENTS.—It is to be assumed that a prospective purchaser, wise enough to employ a professional auditor to investigate the business he expects to buy, will, if he acquires the business, bond all employees and have the accounts audited periodically thereafter, so that any past loss through embezzlement can be eliminated from the expenses.

Auditors should impress upon new executives the value of surety bonds for all employees. Many employers who have postponed action for many years never do get around to it, but a new proprietor can insist on this matter without offending any sensitive employee. Failure to observe this precaution has entailed enormous losses to some concerns.

FIRE AND OTHER LOSSES NOT INSURED.—Likewise, the purchaser should carry an ample line of all kinds of insurance, so that if there has been a fire loss not fully covered, or if an employee has been injured and no liability insurance has been carried, or if plate glass windows be broken, etc., the losses so sustained can be eliminated from the current expenses—which should include, however, a sum equal to the premiums on such insurance as if it had been carried.

Another form of protection which prudent business men carry is "profit" insurance. This covers loss of the estimated profit which might have been earned had no fire occurred. The rate is about the same as for fire insurance, which in most manufacturing plants is extremely low.

It cannot be held, however, that an auditor can certify that the earnings of a certain business would have been a given sum if a fire had not occurred. If profit insurance had been carried, and the face of the policies collected, there could be no objection

to stating the source of such receipts, but even then it is questionable if an auditor should include the income so derived among current earnings. If all of the unavoidable expenses incurred during the time the plant is not in operation are taken into consideration, there is no great objection to including the proceeds of insurance among current earnings, but the item is not a usual one and for comparative purposes cannot be regarded as normal.

Actions at Law.—Where any considerable expenditure has been made by reason of a verdict or compromise arising out of a suit on contract or infringement, etc., it may be that part of such payment is properly included among the current expenses, but that a part is applicable to prior periods. The auditor must deal with such items on their own merits.

(g) Adjustments and Qualifications

Partners' Salaries.—In stating the accounts of a business in connection with a sale, it is customary to eliminate from the expenses the amount charged on the books as partners' salaries. This may be misleading, particularly when the earnings are shown in support of an issue of bonds or preferred stock. For instance, the statement may be made that the net earnings of a partnership have averaged $48,000 per annum, this being four times the interest on an issue of $200,000 6 per cent preferred stock. In arriving at the net profit, custom decrees that the partners' compensation may be omitted. It is true that, unless mention is made of the amount, it is difficult for anyone without a knowledge of the facts to form an opinion on the matter. Partners frequently pay themselves large periodical sums carried on the books as salaries. Many others credit themselves with about the equivalent of the salary of a manager or a good salesman, while in many cases no salary at all is allowed for.

In the case mentioned it may be expected that after the corporation is formed, the officers (former partners) will insist on

salaries unless they have stipulated that none will be voted or drawn. Such stipulation is rare, so that it is not unusual in a corporation of this size for salaries of $15,000 to $25,000 to be voted to the new officers. This becomes a charge to income, and thereby reduces the amount available for dividends on the preferred stock. In other words, the future net income will be largely diminished, perhaps half, through the change of name from "partners' withdrawals" (not an expense) to "officers' salaries" (an expense). Therefore a charge should be inserted for *management salaries*. In cases of financing there is frequently some contract provision fixing the amount so to be paid. In any event an intelligent estimate can and should be made.

An auditor is never justified in signing a certificate omitting partners' compensation, unless the fact is clearly stated, and any reference to the bearing past net income has on a bond or stock issue is qualified by this omission.

CONTRACTS.—If a business is of such a nature that contracts for purchases or sales to be received or delivered in the future are the custom, it is not sufficient to stop with the results of the last fiscal period unless the effect of the contracts outstanding at that time be considered.

For instance, contracts may have been entered into for raw materials at a high figure, and at the time of the examination the market may be much lower. During recent years good accounting practice has demanded that reserves be set up for the accrued losses when the amount is determinable; when this is not feasible the estimated amount of the loss should be shown as a memorandum on the face of the balance sheet.

If the contracts cannot be canceled, with the consequence that the new period is saddled with the necessity of buying materials at an inflated price, the auditor must adjust the accounts accordingly. It may be that the prospective purchaser has full knowledge of the unfavorable agreements, but the auditor must not assume this. If it is stated that unfavorable contracts

for purchases or sales can be canceled, something more than the word of an interested party should be necessary to convince the auditor.

TAXES.—While considering adjustments, the subject of taxes must be considered. It is becoming popular to levy taxes on whatever person or thing will stand it. In many localities real estate taxes are increasing steadily from year to year. At the time of the examination, if an assessment has been made for the following year, the auditor should inspect it and compare the amount payable thereunder with the previous year. As there may be an increase in the valuation as well as the rate, the increased taxes may be a sufficiently large factor to force a somewhat lower price from the seller.

ROYALTIES.—Where royalties have been paid under a license, and the financing provides for the purchase of the patents or copyrights, it may be permissible to eliminate from expenses the amounts paid in the past, so far as the possibilities of the future are concerned. But it may be unsafe to make the adjustment unless every detail of the acquisition of the patents is available and it is found that a clear saving will result. Verbal statements of this nature, relied on by auditors, have led to unfortunate experiences in the past.

The adjustment must include a periodical allowance for the extinguishment of the price paid for the patent or copyright.

The capitalization, or proposed capitalization, in case of a purchase must not be confused with the treatment of royalties in the income account. Royalties paid constitute an expense, and royalties received represent income. In the former case it is assumed that the patents (if it is out of patents that the royalties arise) are not owned, and in the latter case that they are owned. If the patents are owned, the only income which can arise directly therefrom is from outsiders. The concern itself receives an equivalent in the form of reduced expenses by reason of not having to pay for the use of the patent.

ORDERS OF PUBLIC SERVICE COMMISSIONS.—In making investigations of public service corporations operating in the jurisdiction of a public service commission, the auditor should not fail to make a thorough inquiry into the question of whether any orders issued by the commission have not been complied with by the corporation whose accounts are the subject of examination. Compliance with such orders may require the expenditure of considerable sums of money—perhaps for purposes which will not result in a corresponding increase of revenue; instead of an increase in revenue, there may be only an increased expense for maintaining or operating appliances required to be installed. If the prospective purchaser has knowledge of the matter, he is in a position to protect himself when conducting negotiations with the seller. In the absence of such knowledge, however, he receives a severe shock on being required, after concluding the purchase, to make the entirely unexpected expenditures necessitated by the orders issued before his coming into possession of the property.

(h) Errors in the Books

As heretofore stated, an investigation is an audit for a special purpose. If the special purpose is the location of errors, then the auditor should proceed as in a regular audit and nothing additional need be said. But in other classes of investigations, the question frequently arises as to how far the auditor should, or must, go in order to satisfy himself that the accounts are correct.

For instance, in an inquiry into earnings, it is necessary that he should be satisfied that the income is at least as much as the aggregate to which he certifies. But suppose part of the income which should have been included has never been carried into the books, having been misappropriated, or lost through carelessness or neglect?

As to this, the opinions of professional accountants differ. Some say that in investigating the net income of a business with reference to a sale, an accountant is not expected to check the

books and entries for the purpose of detecting falsifications, there being a marked difference between an audit and an investigation with a view to profits, that some defalcations could not be discovered without verifying footings, postings, and vouchers, and that clients do not desire, and are unwilling to pay for, a detailed audit. On the other hand, it is contended that an auditor is not justified in certifying to a balance sheet and income account unless an audit has been made.

Tests Required.—In the author's opinion, the test of what should be done depends upon the nature of the result to be attained. If an auditor is requested to examine the accounts of a business for a period of years, to state and certify to the net income realized and to the financial condition as of a certain date, then it is proper to restrict oneself to the actual work necessary, and additional work is superfluous. If income or assets have been omitted, and the omission cannot be detected unless a complete audit is made, nevertheless the auditor has fulfilled his duty. If expenses or liabilities have been omitted, the auditor cannot be excused even if a detailed audit is necessary to discover the omissions.

No examination along the lines indicated can be considered as complete in any event unless intelligent analyses are made of the various income and expense accounts. These analyses may disclose fraud or errors of principle if they exist.

The Final Test.—The final test of the sufficiency of the examination lies in the skill with which the work is handled. If the auditor brings to bear all of the care and skill which may reasonably be demanded of an experienced practitioner, then he cannot be held morally or professionally responsible for well-concealed errors or omissions, but it must be remembered that the degree of care and skill called for is much greater than is expected or legally demanded from an inexperienced person or one who does not hold himself out as a professional auditor.

(i) Investigation on Behalf of a Retiring Partner When the Business Is Being Sold to a Continuing Partner

When the retirement of a partner is caused by his death or by physical disability, a "continuing" partner may also be a "liquidating" partner. In such case the continuing partner is charged with a greater degree of responsibility than that to which the purchaser of a business under other circumstances is held. The continuing partner is in the best position to protect his own interests, and the auditor's connection with the liquidation of the old firm will most frequently be as representative of the retiring partner.

Special Conditions.—The auditor should do all the work which is usually included in an investigation made for an intending purchaser, but there are, in addition, certain other phases of the situation which should receive consideration, and it is these of which mention will be made. It is only equitable that the assets should be valued on the basis of a going concern, and it is clearly the duty of the auditor to see that they are not undervalued. It is most satisfactory to have independent appraisers employed to value such assets as plant and stock-in-trade, due consideration being given both to the circumstances of the case and the rights of each of the partners. Frequently, however, this is not done, and the business is liquidated by the continuing partner, who himself values the various assets. While specific rules to be followed can hardly be laid down, it should be observed that in cases of doubt as to values the absent partner should have the benefit thereof. This is only fair because the surviving or continuing partner is in a position to secure what he believes to be his rights, whereas the retiring partner, through death or absence, is not in the same position to urge the consideration of his rights. It is an established rule of law that a liquidating partner must not take advantage of his position, and this of itself is sufficient reason for his deciding all doubtful cases in favor of the absent partner.

ACCOUNTS RECEIVABLE, ETC.—Accounts receivable and any other choses in action should be "worked out." The continuing partner is not entitled to any commission for his own services in this connection, though he should be reimbursed for the actual expenses incurred for clerical work entailed thereby. Discounts and other allowances credited to customers upon settlement of the outstanding accounts should be carefully scrutinized. Goods returned by customers subsequent to the date of dissolution are ordinarily taken into the stock of the new business, and, unless particular attention is given to this class of transactions, the charge which should be made to the new business and credited to the liquidation of the old may very easily be overlooked. Unless the total amount involved is very small indeed, all credits to old customers other than for cash should be analyzed. Those which are for goods returned can then be made the subject of further investigation.

STOCK ON HAND.—The valuation of the stock on hand is likely to present considerable difficulty. The usual rule of valuing the stock at "cost or market, whichever is lower," does not necessarily apply in such a case. The liquidating partner is under obligation to secure the largest return for all the assets of the business, and he has a right to sell the stock to himself, which he is in effect doing, only if he is willing to pay as much, or more, for it than can be secured from anyone else. This is not to be construed as meaning what can be secured at a forced sale.

The fairest valuation is probably the cost of duplicating the stock as of the date of dissolution, due allowance being made for obsolete or imperfect stock. If the inventory includes only staple goods, little difficulty is encountered in ascertaining the present cost of duplicating them. If the goods, however, have been made to special order, or are otherwise difficult to value, estimates can be secured from manufacturers for making similar articles, or the actual sales of the goods in the inventory can be traced and the customary rates of gross profit applied to esti-

mate the cost. These matters should be covered by an agreement. In drawing such agreements the auditor should be consulted.

If it be agreed to value the stock on the basis of cost, it is to be remembered that this should include not only the original purchase price of the goods, but also freight, cartage, and any other direct charges for handling and placing the goods in stock. It is sometimes urged that the term "cost" in such a case should include interest from the date of purchase to the date of the inventory. This does not seem logical, however, inasmuch as, if market prices are still the same as at the date the goods were bought, the fact that the goods have been in stock a number of months does not add to their value. On the contrary, the longer the goods have been on hand, the greater is the probability of their already being, or becoming at an early date, unsalable.

Apportionment of Profits and Losses.—Profits realized or losses sustained on the completion of contracts made prior to the dissolution of the partnership are to be apportioned between the retiring and continuing partners. Inasmuch as the retiring partner shared in the expenses of securing the contracts and participated in the risk of undertaking them, it is only fair that he should participate in the profits derived therefrom. On the other hand, he should also help to bear the burden of any losses sustained in carrying out contracts which were made prior to the dissolution of the partnership. There is no reason why the continuing partner should be called on to bear the burden alone, unless a specific agreement is reached under which the continuing partner takes over the contracts at specific values and assumes all further risk in connection with their completion. To do this it is, of course, necessary to secure the consent of all other parties to the contracts, so that the retiring partner or his estate may be released from all liability for the execution of the contracts.

Machinery and Fixtures.—Usually the most equitable method of valuing machinery and fixtures seems to be cost less

proper depreciation allowances. If this differs materially from the cost of reproduction at the present time (also making allowance in this case for accrued depreciation), the valuation must probably be made the subject of compromise between the parties.

MISCELLANEOUS.—While the correctness of the balance sheet is of pre-eminent importance in an investigation such as the one under consideration, the correctness of the income account is likewise of importance if the good-will is valued on the basis of past earnings. It is also necessary to review the expenses entering into the income account for a period prior to the date of dissolution, so as to see that no prepaid expenses which apply subsequent to the date of dissolution have been absorbed by the old business. The retiring partner will, in due course, be debited with his proportion of all expenses chargeable to the old firm, even though they may not have appeared among the liabilities stated on the books at the time of his retirement. Prepaid expenses applying to the new business are not, however, so likely to be brought into the liquidation account if they were absorbed in the operations of the old firm.

There are still other questions, such as partners' salaries and interest on partners' accounts, which must be carefully considered in the light of the partnership agreement.

(j) Investigation for Those in Charge of Reorganizations

There is an increasing demand for the services of accountants in connection with reorganizations. The special features of such examinations are admirably expressed by Sir A. Lowes Dickinson, C.P.A., in his work "Accounting Practice and Procedure":[3]

> The consideration of a plan for the reorganization of a property which has been reduced to a condition of insolvency, requires a full and accurate knowledge of all the existing conditions with regard to the property and its past and probable future earning capacity. The elements to be investigated and determined will therefore be as follows:

[3] Page 245.

1. The sources and nature of the gross earnings, and the prospects of any increases therein without further expenditures for development.

2. The cost of operation, with particular reference to the effect thereon of bad management or bad organization, and to the possibility of remedying these conditions; and the proportion which the cost of operation has borne and may be expected to bear to the gross earnings.

3. A comparison of the gross and net earnings and capitalization of the property with some actual or desirable standard, so as to determine the proportion which one should bear to the other if the reorganization is to prove successful.

4. Hence, to arrive at the total interest-bearing and dividend-paying capital which the reorganized property will stand on some fixed interest basis.

5. The rank of the different classes of obligations, having regard to the property pledged as security therefor; the margin of security; the rate of interest; the date of maturity; the equivalent par value on the basis of the standard rate of interest adopted for all classes; and, if practicable, the extent to which the properties specifically mortgaged show sufficient earnings to meet interest on the indebtedness secured thereon. This class of information will probably require a report from an engineer or other expert on the value and the condition of the physical property.

6. Following upon the determination of these factors, a consideration of the various separately mortgaged divisions of the property, with a view to determining whether any should be abandoned to the bondholders, rather than be included in a reorganization; and here it is important to observe that the contribution of any specific piece of property to the general organization is not necessarily measured by its ability by itself to earn interest on the obligations secured thereon. Numerous other factors will enter into a consideration of this point, and it may easily appear that a property earning little or nothing towards payment of its obligations is sufficiently valuable to the organization, as a whole, to be retained if possible.

7. Another important factor is the amount of new money required to be introduced for the purpose of paying off the floating debt and rehabilitating the property, and the best method of raising such money—whether by the issue of new prior lien securities ranking in front of or on an equali y with those issued in exchange for existing mortgages, or by assessments on junior classes of securities. In the latter case it is important that sufficient inducement be given to the junior classes, in the proportion of new securities issued for old, to induce them to pay these assessments; while for the assessments themselves, the securities issued should represent the par value of the cash paid in on some reasonable market valuation.

CHAPTER XXII

INVESTIGATIONS (Concluded)

Auditors are frequently called upon to make examinations the scope of which is practically limited to certain accounts about which the most complete detail is required. For instance, a manufacturer may desire to extend a large line of credit to a jobber or merchant, and before doing so wants to know the latter's capacity for handling his line, as well as to know that his financial condition and method of doing business are satisfactory.

INVESTIGATION ON BEHALF OF A PRESENT OR PROSPECTIVE CREDITOR

Examinations along these lines may be divided into two general classes:

For bankers or note-brokers who propose to loan on the promissory notes of the borrower, or for bankers who propose to bring out bond or preferred stock issues.

For individuals or business concerns who propose to make advances for various purposes, or who have extended or who expect to extend credit on open account.

In the main, the points to be observed have been discussed in the chapters on the conduct of a balance sheet audit, but there are certain special precautions which may, with propriety, be enlarged upon at this time.

(a) Examinations for Bankers

Extension of Business.—The most important line of examination, after ascertaining the assets and liabilities and analyzing the income account, is an inquiry into the plans for the future which have been adopted or which are under

consideration. The average business man is not content with a stationary business. He wishes to expand for the purpose of increasing his profits, decreasing his expense ratio, and perhaps the most compelling of all reasons is his ambition to outstrip his competitors.

If his floating debt has been burdensome, he may have been obliged to keep within certain bounds as to capacity and production, but the moment he is financed it seems almost inevitable that new liabilities are incurred sufficient to use up the additional supply of credit almost before it is available.

Accountants do not always feel concerned with this phase of business life, but, since the lender should have some means of determining the use to which his money is to be put other than that supplied or promised by the borrower, he naturally looks to the professional auditor. True, he has looked in vain in many cases, and this may explain the reason why so many banks, bankers, and financiers have secured the services of men who can secure and impart the information required, whether or not they have the degree of Certified Public Accountant.

Collateral versus Integrity.—Which is better, to loan money to a dishonest man on ample security, or to a perfectly honest man who wishes to borrow on his own name and who cannot furnish collateral? The former may seem to be more advisable, but there are disadvantages in doing any business whatever with a man who cannot be trusted.

In a federal investigation, the late J. P. Morgan testified:

> Credit is personal. Money can't buy credit. Men can borrow money who have most limited properties. The first thing they want is their record. Money is loaned on collateral, of course, but I would not lend a dollar to a man whom I could not trust, if he came to me with all the government bonds in Christendom.

Therefore, no matter how good the collateral may be, the banker wants more information, and the auditor may be able to

furnish it. Facts relative to previous business experiences, possible failures or embarrassments caused by speculation, etc., can be secured from the mercantile agencies, but inside information relative to the personnel of the organization can be furnished by the auditor.

Experience has demonstrated that where partners quarrel, or where one does all the work, trouble follows. Large concerns, solvent so far as finances go, have been placed in the hands of receivers because of internal dissensions. A banker does not want to make a loan which may be paid off eventually by a receiver, even if the assets are double the liabilities.

Then one or more departments of the business may be weak. The sales force may be highly organized and efficient, but if the manufacturing department is poorly managed, or is not coordinated with the sales department, the results will not be satisfactory.

If no criticism is justified and a man's honesty is unquestioned, a banker may prefer the risk to the apparent safety of a loan secured by collateral. It has been said that "a crooked borrower is always a wise window-dresser," and this observation may be enlarged to remind the banker that crooked borrowers when negotiating a loan sometimes offer collateral to which they do not have title.

Future Business.—During the progress of any audit which comprehends a balance sheet, there should be available full data with respect to future business and the means whereby it is proposed to finance it.

Schedules of orders booked, the time estimated to complete same, the cost of the raw materials, labor, and other manufacturing expenses, the time within which the proceeds of sales will mature, the dates by which the liabilities for purchase will have to be discharged, and many other factors are all to be compiled and put into readable and dependable form.

If funds are to be furnished to meet pressing obligations, and

if any increase in the business means the tying up of additional cash for a considerable period, then there may be a hesitancy about supplying the needs unless a stipulation is furnished that additional business will not be sought until the funds with which to finance it are in sight. The auditor who can secure information of this nature may be helpful to the banker and even more so to the borrower, for it is of no permanent advantage to the latter to be tided over one period of stringency merely to be plunged into another and more serious situation.

Bank Loans to Be Repaid.—The auditor must bear in mind that the banker whom he represents in these investigations is considering the investment of deposits which are chiefly payable on demand, therefore he is not contemplating the making of a permanent loan, but one which will be repaid within a comparatively short time. If a banker were looking purely for security, he would invest a large portion of his funds in real estate mortgages. The security might be better than commercial paper, but the maturities would be from one to three years, and hence entirely unsuitable for his purposes.

If the auditor ascertains that the prospective borrower does not expect to "clean up" at least once a year, he should so report to his client.

(b) Investigations After Bankruptcy

Auditors are frequently called upon by creditors or other interested parties to make investigations of bankrupt or insolvent concerns and to report upon their condition and the causes of insolvency. The detailed work of examinations of this class is, in the main, quite similar to that in connection with a regular audit. Certain features, however, call for special attention.

These examinations fall into two general divisions:

1. To serve as a basis for intelligent action by a creditors' committee in connection with the filing of a petition

for a possible extension of time, or preparatory to the liquidation of the business of the bankrupt.

2. To furnish information and assistance incidental to a proper consideration of an offer of composition or other settlement.

In respect to the former, the auditor must guard against inflated assets, and understated and omitted liabilities, whereas in the latter case the reverse conditions must be looked for. The greatest care should be exercised in the verification of the assets and liabilities, and documentary evidence in support thereof should be obtained wherever possible. A good plan is to secure, if possible, statements rendered by the bankrupt to credit agencies, say, a year or so prior to the date of examination. A comparison thereof with the books may possibly indicate some assets which do not appear on the latter.

The detailed examination should extend, at least, over the period during which preferential transfers or payments may have been made. These would consist of transfers of property while insolvent, with intent to hinder, delay, or defraud creditors; or with the intention to prefer one creditor over others of the same class. Transfers of property without compensation, or at unreasonably low valuations, should be carefully investigated and scheduled, and special attention directed thereto in the report.

The accounts should be carefully examined for predated payments to creditors, chattel mortgages on merchandise, and payments to creditors charged to expense accounts, since preferences are sometimes effected in this manner.

If the identity of the merchandise can be established by numbers, trade-marks, or other symbols, it is advisable to trace the largest items in verification of the inventory totals. This may also disclose shortages of goods of such amounts as to support the inference that goods were shipped out to friends or relatives. Instances of this kind are of frequent occurrence.

If the examination is made in connection with a proposed

settlement, inventory valuations should be very carefully verified. Instances are known in which undervaluation was attempted by employing excessively low prices. Goods stated to be of no value because of alleged damage should be called for and inspected. If necessary, the services of an expert appraiser should be had for this purpose. Misstatement of inventories is more frequently attempted than is the case with other assets, possibly because detection thereof is more difficult. The auditor, therefore, must be especially vigilant in this regard.

It is extremely important to vouch cash payments during the period selected for review. This is especially true of all large amounts.

In one bankruptcy case it was found that cheques were drawn to the order of various employees who posed as creditors. The cheques were duly cashed and the proceeds eventually paid over to the partners of the concern in question.

A critical scrutiny of the receipts and payments for unusual items may sometimes disclose the existence of a silent partner, as evidenced perhaps by interest payments or remittances for profits, etc.

The accounts receivable should be closely scrutinized, deductions made for the doubtful items, and the bad items listed separately. All the accounts should, if possible, be confirmed by correspondence. Accounts with large balances, said to be uncollectible, should be regarded with suspicion and subjected to independent verification. Inquiry among other houses in the same line of business may result in the auditor's finding that some of the alleged doubtful accounts are good.

Accounts with salesmen covering goods in hand, either as samples or for sale, also cash advances for expenses, commissions, etc., should receive careful attention. These accounts are frequently stated to be worthless in order to make a poor showing and thereby to induce the creditors to accept an unfavorable settlement. Commissions due to salesmen should be verified by reference to the sales records, and by an inspection of the

salesmen's contracts, if any exist. The auditor should satisfy himself that the commissions stated as due have accrued on actual sales and that the respective salesmen are entitled thereto.

With reference to accounts payable, the auditor should be certain that all items are included and that the respective amounts recorded as due are actually owing. He should also, as far as possible, establish the propriety of claims presented and endeavor to provide for all possible claims not received at the time statements are submitted. The statements usually prepared consist of a statement of affairs, with supporting schedules, and a deficiency account. If the auditor is still in charge, in cases where there is a final winding up of affairs, a statement of realization and liquidation is prepared.

It is essential in this class of examinations for the auditor to verify and account for all the assets and liabilities that appear on the books, and to establish the possible existence of assets and liabilities not revealed in the accounts. He must be extremely conservative in estimating the realizable values, always keeping in mind that his report will, in all probability, be relied upon by the creditors, and that a too optimistic report results in disappointments that reflect on his accounting ability.

(c) Investigation for Purely Credit Purposes

The credit manager of a business concern or the representative of a capitalist who contemplates extending credit to a prospective borrower or debtor, must proceed along somewhat different lines than the professional auditor, whose duty is to report upon actual conditions, and upon whom the responsibility is not laid of having to determine immediate action, based more on the estimated outcome of the future than on present financial strength.

For instance, an auditor may ascertain and report that a certain man had cash on hand of $100,000 and no debts. He has no further responsibility thereafter, unless it is shown subsequently that there are undisclosed liabilities. We will assume, however, that the facts were as reported.

TASK OF CREDIT MANAGER.—The credit manager may have an entirely different task before him. He should use the same means to ascertain that the $100,000 was actually on hand and free from liens, and that there were no liabilities, but his work is then, in a sense, merely beginning. He should ascertain the past and present moral and business reputation of the man; he should have an accurate and complete history of his business career; he should question him in detail as to what he intends to do with the money; whether his proposed business venture calls for a capital of more than $100,000, and so on.

It has been said that the credit manager must always look out for three essential elements in passing on a credit basis, viz., character, capital, and capacity—three "C's," and therefore easily remembered.

AUDITOR VERSUS CREDIT MANAGER.—The author feels that there are so many points of contact between a professional auditor and a credit manager that this opportunity should be taken to discuss the similarities of their work, with a view to standardizing as much of it as possible.

It is not contended that the auditor should attempt all the manifold duties of the credit manager, or that the latter should burden himself with the technical knowledge required to make a detailed audit. It is, however, urged, without fear of contradiction, that an auditor is able to render better service to his clients if he can acquire some of the instincts of the successful credit manager and keep constantly before him, when making investigations involving proposed credits or investments, many of the requirements which the science of credits has found to be essential. Likewise, who will deny that the credit manager could perform his work more easily and scientifically if he were conversant with the principles, and could take advantage of the experience, underlying the practice of professional auditing?

The National Association of Credit Men's bulletins contain this:

The giver of credit is a contributor of capital, and becomes, in a certain sense, a partner of the debtor, and, as such, has a perfect right to complete information of the debtor's condition at all times.

Credit is given a merchant because of the confidence reposed in him. Requesting a statement when credit is asked is not a reflection on one's character, honesty, or business ability, but is done to secure information to enable business to be conducted intelligently.

When a statement is made it should be absolutely correct. To make it so necessitates the taking of at least an annual inventory and the keeping of an accurate set of books. Statement giving, therefore, will tend to make a debtor a better buyer, because more familiar with his stock, more careful in giving credit, more conservative in incurring debt, and will result in a better knowledge of his business generally.

A merchant who desires to serve his own best interests should recognize that his most valuable possession, apart from his actual assets, is a sound, substantial and unquestioned reputation as a credit risk, and that, under the prevailing conditions and demands of business, the most effective, and eminently the best way to prove his basis for credit is to be willing to submit a statement of his financial condition.

The liabilities in business failures aggregated over $430,000,000 during the first nine months of 1921. The annual average has been in excess of that sum. It is estimated that the loss to creditors is more than half of the total liabilities. In a very large proportion of these cases credit could not be secured if the debtor were obliged to submit his books to an examination by a professional auditor.

Is it unreasonable to suppose that the general use of auditors to verify the accounts of concerns seeking credit would save 10 per cent of the annual loss of nearly $300,000,000? If a saving of, say, $30,000,000 can be effected by the expenditure of, say, $1,000,000, is it not worth while to attempt to save another 10 per cent or more by compulsory audits of all concerns seeking credit?

It is a great surprise to credit managers when they realize losses from respected concerns—those concerns whose statements the bankers and credit men do not verify personally, or cause to be verified by some independent means.

Causes of Inaccuracies.—It is because credit managers do not, as a rule, recognize the fact that most concerns cannot be depended upon to furnish a true statement of their financial condition. Aside from fraud, inaccuracies (which are just as expensive as fraud) arise from the following causes:

1. The fallibility of human nature, which, with respect to financial statements, tends to optimism, the making the best of things, which inevitably leads to the perhaps unconscious overstatement of assets, and understatement of liabilities.
2. The inevitable errors which arise in the use of estimates, honest errors, but errors which almost always result in an overstatement of net worth.
3. Ignorance of executives and clerks, inefficient methods and systems, resulting in misleading statements of financial condition. Strange to say, such statements nearly always overstate net worth.
4. Consciousness of weak spots, but coupled with a mental reservation to adjust them later.

If we can agree that the factors named are of sufficient importance to warrant an independent verification; if it is true that for his own sake, as well as for the benefit of the dispenser of credit, the seeker for credit should have his statement verified, how is it to be done?

The answer to this question is simple. It may be accomplished by proper recognition on the part of the credit manager of the value of verified financial statements and insistence upon the practice; and by a proper recognition on the part of the professional auditor of the point of view of the credit manager. The responsibility will then rest upon the auditor for audit certificates which can be depended upon.

Unscientific Methods.—Such methods affect business success quite as much as anything else. The auditor may find a satisfactory surplus of assets, but if carelessness or incompetence

exists in the accounting and other departments, a day of reckoning will surely arrive.

Signs of carelessness or incompetence may be found in lax collection methods. More than one failure has resulted from a policy of allowing collections to take care of themselves.

The precise procedure followed should be ascertained and reduced to writing. The "follow-up" system must be examined very carefully. It may be that the system is good, but that it is not being followed. Then the relation between the departments must be looked into. Co-ordination here is absolutely essential to success. Sometimes a credit department claims that the salesmen are so anxious to sell that a considerable part of the business must be refused. This brings up the question of co-ordination among the various departments of a business. If it is lacking, one of the elements of failure is present.

An investigation into the methods of doing business thus becomes a necessity when one is looking into the future probabilities of success or failure. Almost anyone can sell goods, but to insure financial success they must be sold at a price which yields a satisfactory profit and to customers who pay. Here again the methods of the prospective debtor are all-important, and the representative of the lender or creditor not only has the right to know whether or not scientific methods are in force, but it is his positive duty to ascertain whether or not such is the case. During the World War, in most lines of business demand exceeded supply. Some men who made fortunes under those conditions refuse to acknowledge that large profits could have been made no matter how badly a business was run. Now that competition has been restored, money is no longer to be made easily.

Lack of Capital.—It is said that more failures result from lack of capital than from any other cause. It may seem superfluous to state that it is better to do a small but safe and profitable business than to attempt to trade beyond the limits of capital employed; yet this overstretching is going on all the time. It is

a point on which the auditor and credit manager can secure accurate information from the balance sheet, but this must be supplemented by an inquiry into plans for extensions to plant, commitments for large purchases for future delivery, and similar negotiations.

Credit Risks.—The passion of a salesman is to sell; the dread of a credit manager is to pass a credit which will produce a loss. Between the two may lie the secret of a successful business and large profits. The burden is upon the credit manager, and he cannot escape it by turning down every order about which any doubt exists.

The conclusions upon which he bases his final decision in any case are dependent upon so many different circumstances that they cannot be enumerated here, but it may be mentioned that the margin between the cost and selling price of an article is one of the most important factors to be considered when the question of the acceptance or rejection of an order is to be settled. If the gross profit is large, it is obvious that more risk may be taken than if the margin of profit is too small to admit of any material amount being set aside for bad debts.

In some lines the gross profit is so large that it is more economical to sell everybody than to maintain a credit department; in others it is equally unnecessary to maintain such a department, because all goods must be shipped sight draft against bill of lading. The point seems obvious yet many accountants and credit managers do not differentiate between the rules to be observed, thus making their general advice of little or no value.

Insurance.—A professional auditor does not always inquire into the sufficiency of insurance of all descriptions, but it is believed that the successful credit manager has this constantly in mind. Auditors now see the importance of this line of inquiry, and among certain firms it is an integral part of the audit program.

Fire insurance is only one of the lines which should be investigated. If the personality of a partner or an employee is of great

value, life insurance may be desirable. Except in a very few lines of business, such as railway or taxicab, a reasonable amount of liability insurance, both public and employers', should always be carried. Rates must be extremely high or the risks must be widely scattered to justify a concern in carrying the risks itself. Before attempting it a complete investigation should be made into the actual results realized by other concerns over a period of years.

Profit insurance is frequently as important as fire insurance, especially if a seasonal business is conducted, and large preliminary expenses, such as advertising, are incurred, and if a total loss would result if a factory were to be destroyed.

Errors of Principle.—It is not enough that a concern's financial statement shall look well, for sometimes actual conditions are concealed through errors in bookkeeping. This state of things exists in more cases than is generally known.

For instance, in a contracting business the bookkeeper, in closing the accounts, closed all of the credit balances in individual contract accounts to income. He did not realize that all of them were not completed and that a considerable liability existed in respect of the cost of completion. His balance sheet showed a much better financial position than the concern deserved, but the bookkeeper maintained that it was correct until he was shown how inaccurate it was.

Errors may be honestly made, and yet they will bring ruin on a concern unless discovered and rectified. Failure to provide for depreciation is the most common dereliction, and excessive charges to asset accounts is a close second. The auditor is always on the lookout for such errors, whether intentional or unintentional, but few credit managers realize the importance of ascertaining whether or not the books of a prospective debtor have been regularly examined by a public accountant.

Fraud.—Under this class the auditor finds far too many examples. The bankruptcy courts are full of cases in which

creditors have been grossly deceived. Many of these are so flagrant that it seems impossible that the debtors should have been able to incur such large debts, yet the fact is obvious that credit managers by the hundred and business concerns by the thousand extend credit to these bankrupts to an aggregate of tens of millions of dollars. The schedules of the bankrupts' debts speak for themselves. The most surprising feature of the whole situation is that in many cases the most cursory examination of the bankrupt's books would have revealed to the trained auditor that gross fraud was being practiced. A more intimate relationship between professional auditors and credit managers would prove to the latter that the auditor can be of inestimable service in many ways.

CHARACTER.—Last but not least is the element of character. In modern business it is almost concealed, owing to the impossibility of continuing the personal relations between bankers and borrowers. The modern borrower's balance sheet may be submitted to hundreds of bankers. But the author would not like to see the audit program of the auditor or credit manager omit all consideration of character.

The banker has to consider primarily the present ability of the borrower to repay the loan, but further than this his business foresight makes it possible for the banker to size up his man and determine whether there is not some inherent lack of character in him, either moral or executive, which may at some future time make the risk more hazardous than if he were entirely normal.

Some unprincipled business men pay all of their debts, but many are found in the bankruptcy courts being relieved of their obligations, and subsequent success does not incline them to pay the debts thus discharged.

The honest man may fail honestly, but if he can he will pay in time, and we may be thankful that there are many such. Therefore let the auditor and the credit manager study human nature and analyze the conditions presented to them, not only

from the financial standpoint but from a moral point of view as well.

(d) Investigation in Patent Litigation

An investigation to ascertain net income realized in the manufacture of patented articles, when infringement of patent rights is claimed and the claim is sustained, or when an examination is ordered pending a decision, presents several novel features, as compared with an ordinary statement of income.

It is not intended to discuss the matter from a legal point of view, and it may be that the principles hereinafter set forth may not be upheld by the courts in some jurisdictions. It is the author's experience, however, that most of these cases are settled out of court owing to the enormous expenses involved in the taking of testimony before masters, who are usually appointed where matters of account are involved.

The following procedure, therefore, may be taken as the result of actual practice, following negotiations which usually involve concessions on both sides, rather than settled rules laid down in judicial decisions.

General Accounting Principles Do Not Govern.—The preliminary conferences, in a matter of this sort, naturally bring out opinions which differ radically. The injured party claims everything that can be imagined, and the defendant produces a statement which shows that the manufacture of the infringing article has been attended with ruinous losses. From the beginning it is a question of gradually drawing the lines closer, until each has stripped his case of redundant matters and the issue is joined.

Ordinary accounting principles do not form the basis of the claim nor of the defense. The following are exceptions to accepted practice:

There seems to be no reason for apportioning any part of the general expenses as a part of the cost of the business. The

infringers would have had these expenses to pay in any event in order to carry on their legitimate business.

If the principal business of the defendants consists of manufacturing or dealing in infringing articles, then it may be proper to include a certain part of the general expenses, but items of a questionable nature should not be included.

As defendants are not supposed to have pushed the sale of the article, it hardly seems proper that any credit should be claimed for special exhibitions.

If the same kind of materials is legitimately used in the manufacture of other goods handled by the defendants, and the purchases are not earmarked at the time for any particular department, it seems improper that credit should be allowed for any materials not clearly identified as having been used in the infringing product.

Based on similar accountings, the defendants are not entitled to place a scrap valuation upon materials remaining on hand when they were compelled to stop the sale of the article, but they could be compelled to scrap the articles on hand at that time, and would not be entitled to any credit whatever for the entire cost of the manufacture of said stock.

It does not seem conceivable that the defendants would be permitted to make a profit out of their wrongdoing, and this would be the result if general expenses and similar items were included, as the tendency would be to reduce the expenses of conducting their legitimate business. If they have been ordered to account for the profit made by them in the manufacture and sale of articles, the courts undoubtedly should hold that the word "profit" as here used means the difference between the proceeds from the sale of an article and the prime cost (that is, labor and material) of such sales, and that the cost of goods on hand at the end of the period should not be treated as an item of cost for which credit can be claimed.

COURT DECISIONS.—The courts, however, do not seem to accept the foregoing view. In the case of *Rubber Company v.*

Goodyear,[1] where a master's report was being commented upon, the court said:

> He refused to allow manufacturer's profits and interest on the capital stock. This was correct. "The profits made in violation of the rights of the complainants" in this class of cases, within the meaning of the law, are to be computed and ascertained by finding the difference between cost and yield. In estimating the cost, the elements of price of materials, interest, expenses of manufacture and sale, and other necessary expenditures, if there be any, and bad debts, are to be taken into the account, and usually nothing else. The calculation is to be made as a manufacturer calculates the profits of his business.

In *Am Ende v. Seabury*,[2] the court said:

> The master properly refused to allow the defendant, as an element of the "factory cost," . . . interest on the capital of the corporation invested in the business.

FRAUD

Following the discovery of an embezzlement may be heard expressions of surprise, based on the fact that the embezzler was a trusted employee. It does not seem to occur to most people that, generally speaking, no one but a trusted employee has an opportunity to defraud others. Every year some trusted employees prove recreant to their trust; therefore mere business prudence demands some form of supervision over all those who have a chance to appropriate to their own use the property of others.

In the preceding chapters an attempt has been made to outline the procedure required in audits of various natures, but the procedure there referred to was not intended to cover those cases in which a particular person is under suspicion or in which a particular form of fraud is suspected, or has been discovered, and in which it is important to locate the guilty party or parties without delay.

---

[1] 76 U. S. 788.
[2] 43 Fed. Rep. 672.

Then, again, it may be that an audit has been made along usual lines without developing anything wrong; but it is found that an employee is living beyond his means, or is constantly seen in bad company, so that a special investigation becomes desirable. The point immediately arises as to whether there are any special checks, or verifications, which are not usually resorted to in an ordinary audit, but which may be useful when applied to specific cases.

Possibilities to Be Studied

In all cases where suspicion exists, the quickest way to locate fraud is to ascertain definitely the opportunities which are normally open to the person suspected, and the possible chances which may not be usually open to such person, but of which he may have taken advantage.

For instance, the treasurer of a company may be known to be spending more than his income, and an inquiry is ordered. If the business is at all large, it is obviously not worth while to commence the investigation in the same way as a general audit, but the wise course is to look into the matters under the personal charge of that officer. Any securities supposed to be in his hands should be called for, and the method of handling cash transactions should be inquired into. If he has always insisted on opening the mail, it may be that customers' accounts have been tampered with; if he has assumed personal charge of the periodical reconciliation of the bank's pass-books with the bank balance, it may be that funds have been withdrawn from the bank and not reported.

If the gross income is unexpectedly small, it may be that stock is being stolen or that fictitious purchases appear in the books.

Extent of Fraud

Frequently the professional auditor is not called in until the embezzlement has been disclosed and his services are desired to fix the total. In such a case experience is invaluable, for the position of the auditor may be a most difficult one. The em-

bezzler usually is called upon to give, or proffers, his assistance, and professes to be most anxious to help get at the whole truth. He states the total amount as positively not exceeding a certain total, and his employer is apt to believe him and to doubt the auditor, whose experience warrants him in stating that thieves rarely tell the truth, and that embezzlers hardly ever know the extent of their own fraud, and when they do know, understate it materially in the hope that their attempts at concealment may be at least partially successful.

There is only one safe rule, and that is to calculate every possible source of income open to the embezzler, the maximum amount of such income, and the longest time possible during which the fraud may have been going on.

Records are often destroyed and many sources of income cannot be traced subsequently; therefore it is never wise to take the word of an embezzler for the amount of his theft.

Attitude Toward an Embezzler

Whenever possible, the embezzler should be required to attend and assist the auditor. This does not mean that his word is to be taken blindly or that he is to be left alone with the books, but he can do no harm, and in countless cases his presence has been of the greatest assistance.

Here the experience and skill of the auditor have full play. By the exercise of tact he may persuade the criminal to disclose many things which the closest examination of the records would not reveal. A clue is often as valuable as a complete disclosure, and it rarely happens that a trained auditor spends any considerable time with an embezzler without discovering directly or incidentally the system employed and other valuable information.

No one knows so well as professional auditors how small a proportion of these crimes are made public, but embezzlers themselves seem to feel intuitively that if they promise to tell all they know and to make restitution, all will be forgiven and forgotten. Unfortunately, from the standpoint of example this is often too

true, but, even though it is true, there can be no objection to an auditor pointing out to the embezzler the fact that if he lies to him (the auditor), it will aggravate his possible punishment. If an examination is likely to result in litigation, the auditor must pay particular attention to any admissions or statements by the suspected party.

The chairman of a board of water commissioners kept a cash book showing his receipts and disbursements. When the balance was ascertained by auditors appointed by the municipality, the chairman was informed of the amount shown by the book to be due from him, the correctness of which he did not dispute. On being asked if he could explain the balance against him, he said he could not, and being then told that it would have to be reported to the authorities, he replied: "Well, you will just have to report it." When he refused to pay subsequently and suit was brought, the court held that this was sufficient evidence upon which to recover the balance.

This supports the principle of law that the statement of an account need not be confined to the original parties. The auditor may have an exceptional chance to secure an admission, and if there is any likelihood of its being used later, he should reduce it to writing at once. This record may be useful in refreshing his memory.

Definitions

Auditors usually work for or with lawyers in cases of fraud, and it is well for them to understand the legal significance of terms in general use.

FORGERY.—Auditors should be familiar with the legal definition of "forgery," which is broader than the usual understanding of its meaning. A recognized definition is the following: "The false making or materially altering, with intent to defraud, of any writing which, if genuine, might apparently be of legal efficacy or the foundation of a legal liability."[3]

[3] 2 Bishop's Criminal Law, Section 523.

FRAUD, as applied to accountancy matters, embraces all dishonest or deceitful acts whereby the owner of property is deprived thereof without his knowledge or consent. The intention to deceive is a characteristic of fraud, but deceit in itself does not reach the gravity of fraud.

EMBEZZLEMENT is the fraudulent appropriation to one's own use of the money or goods intrusted to his care by another. The auditor should distinguish embezzlement from larceny or theft, because in the case of embezzlement the original custody or receipt of the money or other property was lawful, or with the consent of the owner, while in larceny the felonious intent must have existed at the time of the taking. Therefore, if an office boy takes and retains currency out of a cash drawer, he is guilty of larceny. If the cashier takes and retains it, he is guilty of embezzlement. In other words, there must be a relation of special trust in regard to the property appropriated, and it must be by virtue of such employment that the money or other property comes into the possession of a person to make it embezzlement within the meaning of the statutes.

MISAPPROPRIATION is not a technical term of law, but is applied to the actions of those who fraudulently deal with money intrusted to them. The correct term for such an act is "embezzlement."

DEFALCATION is not a technical term. As a default usually implies that property appropriated to one's own use originally came into his possession legally, the correct term is "embezzlement."

CHAPTER XXIII

THE DETAILED AUDIT

GENERAL PRINCIPLES

The chief point of distinction between balance sheet and detailed audits is that in balance sheet audits the work centers at a specified date, whereas in detailed audits the transactions during a fiscal period must all be verified; it is true that the verification consists largely of review and tests, none the less the tests must cover the entire period under review. In detailed audits as well as in balance sheet audits, balance sheet items must be verified. Likewise, in both classes of audits reports dealing with the work accomplished must be rendered. Before starting detailed audits, the auditor should acquaint himself with the points discussed in the preceding chapters, make all relevant matters a part of his audit program, and in addition give consideration to the following new points which need not be dealt with in balance sheet audits.

Completed Audit

It was stated on page 61 that, before commencing an audit, the auditor should secure a correct trial balance as of the closing date. This applies to the *completed audit*, that is, an audit made where a complete accounting period has elapsed and for which a final report is to be made on the work accomplished. The procedure outlined in this and succeeding chapters describes the procedure for a completed audit.

Continuous Audit

This term applies to the supervision by an auditor who attends at intervals *during* a period, and each time makes a

progress report instead of a report which embodies a balance sheet and an income account.

The auditor who is retained to audit the accounts and pass on or prepare monthly reports may be said to make a completed audit, although in some cases part of the audit work is left unfinished until the end of the fiscal period.

When to Do Work.—When, in large enterprises, a detailed audit is made, the auditor may arrange to perform part of the work during the term, in order to avoid congestion near the end of the period. Sometimes the client requests that frequent visits be made, so that if errors of principle or clerical errors are being made they can be detected and corrected before much damage is done. It is important, too, that if fraud is being practiced it should be discovered at the earliest possible date. Furthermore, frequent and unexpected visits tend to keep the client's staff up to date in their work, to disclose carelessness as well as actual errors, and to create a good moral effect.

If much detail work is to be verified, it should be completed as soon after the closing date as possible, in order that the auditor's report may be submitted as soon as possible thereafter.

Manipulation of Accounts.—When interim audits are made and when the auditor, in subsequent audits, relies on the work of these previous visits, he should take care that the figures which he has passed have not been tampered with in order to conceal fraud. The author is not, however, prepared to offer suggestions for the detection of manipulation of accounts after they have been audited. In the preparation of the balance sheet and income account, if the accounts are analyzed, unauthorized alterations, if any, will probably be revealed. Experience has demonstrated that such a contingency is a remote one and that the intuition of the auditor guards against it better than do certain set rules.

Completed audits are fast supplanting continuous audits, and so it is deemed to be of more importance here to describe the

former fully. The auditor who masters all the essentials of a completed audit can readily prepare for a continuous audit.

Auditing by Tests and Scrutiny

In various sections of this book the author refers to "tests" or to "tests and scrutiny." The application of these terms must not be misunderstood, particularly with reference to detailed audits. In a business of any considerable size it is a physical impossibility for the auditor to verify every entry in the books within a reasonable period of time, nor is it necessary in most cases, even where carelessness and fraud exist.

"Test" Defined.—The following definitions of the word "test" indicate its scope:

1. To try by subjecting to some experiment, or by examination and comparison; to subject to conditions that disclose the true character of.
2. An examination made for the purpose of proving or disproving some matter in doubt.

Using the word "test" in this broad sense the auditor, by experience, learns to eliminate unnecessary and time-consuming work and to substitute therefor necessary and constructive work.

"Scrutiny."—It is suggested that in some cases tests of certain periods or certain quantities justify the auditor in concluding that the transactions during other periods and of other quantities are correct, if no errors are disclosed by such tests. This, however, does not always relieve the auditor from the duty of scrutinizing the transactions of the uncovered period, and the verified quantities. The word "scrutiny," as used here, is supplementary to the word "test."

The time consumed in verifying in detail all items applicable to a limited period may be considerable; however, an experienced auditor, in a relatively much shorter time, can scan the unverified

items for unusual items or suspicious entries. It is confidently predicted that an audit program based on these principles will disclose any practice subject to criticism.

THE AUDIT OF EARNINGS AND EXPENSES

General Principles

Two underlying principles govern procedure in the detailed audit of earnings and expenses:

1. The auditor must ascertain whether the earnings shown by the books are properly accounted for, and whether any of the earnings are omitted therefrom.
2. He must ascertain whether the expenses and losses are properly stated and supported.

The Clerical Staff.—At the commencement of a detailed audit the auditor should investigate thoroughly the relation of the clerical staff to the work and to each other. Auditors are fond of stating that a cashier should never have access to the ledgers, and that a ledger clerk should never have access to the cash. Theoretically this is an ideal condition and actually exists in most large concerns; not, however, because the proprietors realize that it is a proper safeguard, but because there is enough work of each class to warrant using the whole time of one clerk for it. But in a small business where the cashier's duties are not extensive enough to keep him busy all the time, he is required to assist with other duties, and naturally he is expected to undertake the work for which he is best qualified—posting to the ledgers. So long as there are proprietors who consider that a bookkeeper's duties comprise those of a cashier as well as those of a ledger clerk, it will be necessary to exercise special vigilance in the audit of their accounts; for fraud is so easily concealed that many clerks yield to temptation, knowing that their defalcation will not be disclosed unless a professional auditor is employed.

In many instances where professional auditors have been

expected, the clerks have used most ingenious means to conceal their fraud. Consequently, an auditor should have a knowledge of as many of these subterfuges as possible in order to detect irregularities of any nature.

Prior Periods

In a detailed audit covering, say, a year, the question frequently arises: What is the auditor's responsibility for the period prior to the commencement date? He should, of course, have it definitely understood that the commencing date be definitely fixed and be supported by a balance sheet which is assumed to be correct.

As a matter of fact, there is little danger in this procedure. A proper audit for a given year sheds much light on the operations of the period immediately preceding. If nothing in the current work gives rise to suspicion, the accounts of the preceding period may be left undisturbed. Of course, if any special reason exists, or if a client insists on going back for two or more years, the auditor must comply; but he should then make the suggestion that the last year should be audited and *reported upon* first, so that there will be a chance for reflection before incurring the expense incident to a long engagement.

The Accrual Method

To be correct, the income account for a given period must contain all of the earnings or revenue and all of the expenses or costs applicable to that period. All transactions during the current period which apply to a previous period should have been included in that period, and all transactions which belong to the succeeding period or periods must be deferred. In the former case, if proper reserves were set up for the items, no adjustment is necessary in the current period. If the accounts of the prior period were closed without making provision therefor, obviously the items must be entered in some place. If the amounts are very small and do not substantially affect the result

of the current period, it is permissible, and if the amounts are quite small, almost necessary, to enter the items as current transactions. If the amounts are substantial it is misleading to enter the items as current transactions; they should be credited to or charged against surplus, but in all cases the aggregate of such adjustments should be included as a special item in the income account for the current period. Otherwise the items will not appear in any income account.

It is hardly possible that an accurate balance sheet or income account of any business can be prepared unless the accrual basis is adopted. Concerns which close their books immediately after the end of a fiscal period almost always fail to include some items which belong in such period. In practically all cases the omitted items are expenses, rather than earnings, so that the errors due to omission usually unduly increase the net income. It is therefore important for an auditor to advise that books be left open long enough to ascertain the amount of liabilities which have been incurred but not discharged at the closing date.

Verification of Footings and Postings

The least important part of the audit is the verification of footings and postings. It is a very small business indeed where there can be any justification for verifying every posting and every footing. In past years about half of the auditing consisted of the laborious work of checking postings in detail and verifying the footings of all books, including the ledgers. An analysis of various defalcations which have occurred in recent years demonstrates that the percentage of frauds which have been concealed by false postings and incorrect footings is small. This small percentage may be covered just as well in what may be called a "test" audit as in a so-called detailed audit. If books are out of balance, it is desirable to check as many postings and footings as possible. This not only gives the auditor a chance to see at first hand the sort of errors which the bookkeepers have been making and thus furnishes data for his report but it also helps along the

current work. Then, too, if all the differences are located, he earns the good-will of the bookkeeper, which is an important matter. Undertaking this kind of work is dangerous, however, unless it has been definitely arranged with the client and unless he understands that part of the work being done is that of an accountant and part that of an auditor.

Tests by Ledger Analysis.—Some auditors test the ledger postings by making up their own controlling accounts, or, reversing the process, by analyzing each ledger account, they extract the totals of each source of original entry. There are very exceptional cases where this plan may be followed, principally where the ledger is not in balance. It is an old-fashioned scheme, however, and has no place in modern methods of auditing. The auditor who knows how to prove such work by tests and scrutiny works at a great advantage and thus gains valuable time which can be devoted to more important work—more important because the largest number of frauds are found elsewhere than in footings and postings. Therefore, in that vast number of audits where there has been no fraud, but where the auditor wishes to justify his employment, *all* the constructive or labor-saving suggestions will arise from the other portions of the work.

Subdivision of Time to Kinds of Work.—Many audits have required four weeks, three of which were consumed in the verification of footings and postings, and one week for the rest of the audit. There can be no hard-and-fast rule as to the time each class of work should take, and it is not worth while to attempt to approximate one. Unless there is justification for doing otherwise, it is far better to spend not over one week on postings and footings, and three weeks on work which afterwards means something to the clients.

The questions arise: Is it not possible that, in thus cutting down the work by two-thirds, too much is taken for granted? Is an auditor excused who neglects such a material part of the work as that of verifying the footings and postings? The second

question is answered by the statement that no auditor can be excused who *neglects any* part of the work. We must, however, be sure in each case that we take nothing for granted until we have made such intelligent and exhaustive tests as assure us that the accounts as a whole are, in our judgment, correct. Note the expression, "in our judgment"; for, the moment you deprive the auditor of the free exercise of his judgment, you reduce him to the position of an automaton, and the title of *professional* auditor then becomes a misnomer. What constitutes an intelligent and exhaustive test of postings and footings? In seeking an answer, first direct attention to the four general groups into which they can be divided. These are: (1) the records of the purchase of goods or materials as reflected in purchase or invoice books, voucher registers, etc.; (2) the records of sales as found in sales books or binders or in any other of the various good and bad forms used; (3) the receipt of cash; (4) the payment of cash.

The majority of postings and footings occur in connection with the records mentioned, so that if we can agree on what constitutes a fair test of these groups or divisions, we can safely leave the remaining records to be dealt with on their merits.

The following suggestions are grounded upon the fundamental principle that no audit is complete unless the trial balances of all the ledgers have been proved. There may be exceptions to this principle as, for instance, in case of a department store in which are kept one hundred individual ledgers. Here an exhaustive test would be sufficient.

1. Purchase Records

If fraud exists in connection with purchases, it usually is found in the form of overcharges or fictitious vendors. Very seldom, if ever, is there any concealment of fraud through manipulations of footings or postings. The auditor does not seek to locate clerical errors in trial balances, but is concerned with the possibility of the trial balance, which is ostensibly in agreement with the books, being *forced*. Since this occurs not only

in cases where fraud exists, but also where there is a lazy or incompetent bookkeeper, the auditor should always be on the lookout for evidence of forced balances. As a rule, however, when a trial balance *is* forced there is no alteration in the current postings and footings. The usual and popular expedient is to transfer in the ledger the last posting during the period to one of the large nominal accounts, such as sales or expenses.

These remarks on the trial balance concern the purchase records in that, no matter what other detail work is omitted, the verification of the postings of the monthly or periodical aggregates to the debit side of the purchase accounts must not be forgotten. Usually the checking of the credit postings can be omitted.

If the concern is a fairly large one and if the audit covers a period of one year, prove the footings of about every tenth or twelfth page in addition to the last page of each month. In a smaller concern, prove, say, every fifth or sixth page, including always the last page for each month. It is difficult to imagine, and wide experience has not developed, a case where such a percentage would not have been as effective in any given audit as the verification of the footing of *every page*. That is, the verification of every page did not disclose any discrepancies (except as hereafter noted), so that, naturally, the work could have been cut down eleven-twelfths with equally good results (except as to cost to the client). The last page in every case is mentioned particularly, because instances are known where such figures have been altered.

2. Sales Records

The monthly or other aggregates of the sales postings should be checked.

There is more fraud in connection with accounts receivable than any other department of a business, but the fraud does not consist in a failure to post to the ledgers the sales which are recorded *in the sales books*. The fraud here consists in entirely omitting the sales from the sales records or in the failure to enter cash collections.

It is, however, important to know that all the sales appearing in the sales record have been posted. As stated above, this can be, and should be, covered by use of a controlling account, since the items are of such a nature that they are grouped in the original records, and if the posting of a thousand entries can be proved by one operation, time is saved. This method is based on the assumption of course, that there is a verified trial balance of the customers ledgers to support the controlling account. The question of accounts which have been collected, but are not so shown, will be considered later.

The verification of the footings in case of sales records is somewhat more important than in case of purchase records. In a large concern, prove, say, every eighth page, and in a small concern, say, every third or fourth page, always including the last and sometimes the next to the last page of each month.

Controlling Account.—If there is a controlling account with customers in the general ledger, it is not necessary to verify in detail the postings of the customers ledgers. If there is no controlling account, the auditor should construct one, so in neither case is it worth while to prove the debit postings.

The controlling account is a compilation of the aggregates of the postings to the individual customers' accounts. They may be classified as follows:

Debits	*Credits*
Total of opening balances, as per last trial balance	Cash
Sales	Discounts
Protested or returned cheques, notes, etc.	Returns and Allowances
Interest, etc.	Notes
	Accounts charged off, etc.
	Total of closing balances

In some sets of books it may take as much work to construct the controlling account as to verify every posting; but even so, the time spent in the preparation of the account is not lost,

because the data thus secured is useful in stating the results of the business.

3. Cheques Received Must Be Deposited

Where the capital stock of corporations is all, or nearly all, owned by its officers or directors, they frequently handle the funds of the corporation as if no corporate responsibility exists. Usually they act honestly and no harm is done; but an auditor cannot afford to pass over illegal acts which come to his knowledge, even though, so far as can be foreseen, no one will be injured thereby.

If an officer uses cheques drawn to the order of the corporation for private purposes the practice cannot be condemned too severely, and yet it is not uncommon. All cheques received should be deposited. The officer can withdraw such sum as the corporation owes him.

In a New York case, decided by the Court of Appeals in 1908 in which the president of a corporation (all the stock of which was owned by himself and the secretary-treasurer) used a cheque drawn to the order of the corporation and indorsed by it to pay his personal debt, the creditors of the corporation, upon its being declared insolvent, compelled the trust company that cashed the cheque to refund the money.[1]

In a case which the author's firm investigated recently, an employee had charge of a small fund created for the purpose of having cash on hand for change and for cashing small cheques in an emergency. He also received certain cash receipts which should have been deposited each day so that only the original fund would be retained. No check was kept on his activities so that a much larger sum than had been contemplated was in his control. An officer of the institution being in financial difficulties persuaded the employee first mentioned to cash his personal cheques out of this fund and to hold the cheques so cashed undeposited. This continued for a period of

[1] *Ward v. City Trust Company of New York*, 192 N. Y. 61.

ten months, when upon an investigation being made of the officer's activities, it was found that he had received from the employee in this way almost three times the amount which should have been in the fund at any one time. This irregularity could not have occurred if the employee had been required to deposit his receipts, including the officer's cheques, daily.

The same officer was designated with his superior to sign the corporation's cheques. Both names had to appear on the cheques to make them valid. The superior, upon being called away on business, signed a number of cheques in blank and left them with his subordinate for use in case of emergency. The officer affixed his signature, made the cheques payable to the corporation, and indorsed them as an officer, securing the cash from the bank. If all cheques to the order of the corporation had been deposited to the corporation's account, this defalcation could not have occurred. In the author's opinion the bank paying these cheques was guilty of gross negligence, because inquiry was not made regarding the inconsistency of requiring two signatures to be attached to the face of the cheques which indicated that funds were not to be withdrawn under one signature, whereas the indorsement by one officer on cheques drawn to the corporation's order was precisely the same thing, and the assumed safeguard of two signatures was lost. Two signatures often fail as safeguards, but banks cannot ignore the provision. If the cheques had been drawn to the personal order of the officer ostensibly for pay-rolls or similar purposes, the bank probably would not have been liable.

4. Periodical Verification of Bank Balances

The auditor should ascertain by personal investigation whether the bank balances have been verified at frequent intervals throughout the period covered by the audit. It frequently happens that clerks are careless about reconciling the bank balances with those shown by the books. In some cases the pass-books are not left for settlement during intervals of many

months; in other cases the pass-books are balanced by the banks and delivered to the depositors, but are not verified by the latter.

The necessity of verifying bank statements immediately after their receipt from the bank is illustrated by a case, the facts of which were as follows: An officer of a corporation, whose duty it was to deposit certain cash receipts, made it a practice to pocket the cash and substitute his own personal cheque. In this way over a period of three months he deposited cheques subsequently returned as worthless, amounting to almost $1,000. If the bank statement for the first of these three months had been verified immediately, the irregularity would have been disclosed, and it would have been almost impossible for it to have been repeated as it was.

The same officer was given a fund of $5,000 to be deposited in his name as a fiscal officer, for the purpose of cashing the salary cheques of employees. On the days payments were to be made, he was supposed to withdraw from the account a sum sufficient to cash all cheques; later in the day he would deposit the cheques so cashed, thus restoring the account to its original condition. He embezzled the entire fund, leaving with the bank only a few dollars which had been credited as interest. For several months he was able to avoid detection and at the same time accommodate the employees by the following methods: On the days payments were to be made, he would present to the bank a cheque for the amount he needed, at the same time requesting the teller to hold the cheque until late in the day. With the money so secured he would cash the employees' cheques and later in the day deposit the cheques so cashed. The teller would then charge the account with the withdrawal which had been made in the morning. Of course, the suspicions of the bank teller should have been aroused and, had he not been negligent in agreeing to hold the officer's cheque, the irregularity would have been discovered. But if the bank statement had been examined by anyone other than the officer guilty of the defalcation, it would have at once been

apparent that the account contained only a few dollars when it should have contained the entire fund at the close of every banking day.

Monthly Statements.—In the middle and far West, the banks have quite generally adopted the plan of sending monthly statements to all depositors, accompanied by the paid cheques. This practice is also becoming prevalent on the part of the banks in the East. This is to be commended, since it leads naturally to more frequent reconciliations of bank balances.

Prompt Examination of Account.—The bank statements may be filed away without examination unless someone in authority insists on prompt attention. Instances have been known where, junior clerks having forged signatures to cheques, the fraud was not discovered for a long time, owing to carelessness in inspecting the bank settlements.

The law is that the writing up of a bank pass-book, with a return of paid cheques, or a statement of account, does not preclude an ascertainment of the true state of the accounts if cheques which are subsequently discovered to be forged are included in the balance. But if the depositor is required by the usages of business or otherwise to examine the account within a reasonable time and to give timely notice of any objections he may have, an omission to perform this duty, leaving the bank to rely upon the presumption that the account is acquiesced in, whereby it is misled to its prejudice, makes the account conclusive. The law is not unreasonable[2] in holding that, where bank settlements lie around untouched for long periods, those in control of the busi-

[2] In *Morgan v. United States Mortgage and Trust Co.*, 208 N. Y. 218; 101 N.E. 871, the court said:

"The paid checks which are returned are the vouchers of the bank for its account as written on the pass-book, and if they are to be made the medium of comparison of accounts the depositor at least ought to endeavor to know that they tally with the pass-book. Otherwise he has made no reliable comparison or verification. Therefore, it seems to me, that when the appellants relied for verification merely on a comparison of vouchers without any effort to verify these by comparison with the check list or pass-book they did not exercise reasonable methods.'

ness should know that a risk is being run for which there is no valid excuse.

Delayed Credit of Deposits by Bank.—When verifying the bank accounts as at the date of the balance sheet, it is recognized that deposits entered in the client's books on the last day of the period as having been made on that day, may legitimately be entered by the banks on the following day. Instances are known where the actual credits by the bank were made long afterwards, which of course proved that they were not made as indicated. When there is an item entered in one period to be completed in another, follow it up carefully and specifically, not generally.

Negligence of Depositor.—In a late decision it was held that the depositor could not recover from the bank for loss through forged signatures or by a change in the amount of a check, because the court considered that the depositor had been negligent and had made the operations of the thief fairly safe and easy. It was brought out in this case that correct entries had been made in the original cash records but that the secondary cash records were falsified. The testimony of the accountant who made periodical examinations of the books, to the effect in substance that it is not necessary to go to the book of original entry in order to check the accuracy of the second entry, was characterized by the court as little less than absurd. The court also held that the plaintiff could not absolve himself of his duty by delegating the duty to some other person to perform and that whatever was done by the accountant was the act (for the purpose of the case) of the plaintiff.[3]

---

[3] In *First National Bank of Richmond v. Richmond Electric Co.*, 56 S.E. 152 (Va.), the court said:

"In the commission of a forgery the employee is not the agent of his principal, and his knowledge cannot be imputed to the principal. But after the forged checks have been paid and returned to the depositor as vouchers . . . if the depositor assigns the duty of examining such vouchers and account to this same clerk, who has had an opportunity of committing a fraud and has done so, then such employee in the discharge of this duty is the agent of the depositor, and such depositor is chargeable with his agent's knowledge of the fraud."

When it is realized that the United States Supreme Court has held that:[4]

> The drawee (bank) can be held bound only to know the signature of the depositor, and not of the handwriting of the body of the check, and money paid in good faith and without negligence on an altered check may be recovered by the bank,

the importance of the reconciliation of the bank balances as soon as the statements are received cannot be overemphasized.

Examination of Indorsements.—Some auditors do not consider it necessary to scrutinize indorsements on paid cheques when reconciling the bank balances, on the theory that the auditor is not familiar with the signatures of those persons who indorse the cheques in writing. This scrutiny requires little more time than a proper examination of the cheques would take. In addition, it serves to keep the auditor on the alert relative to the possibility of irregularities through the names of payees. In many cases banks pay cheques which have not been indorsed by the payees. Usually no loss ensues, but the absence of such indorsements may be embarrassing when it is necessary to prove that the payees received the proceeds of the cheques.

In a recent case an employee, the head of the insurance department of an investment company, the plaintiff, forged indorsements on cheques which he had had drawn by the company. These forgeries continued over a period of nineteen months, during which time the bank sent the depositor, regularly every half month, a statement of the account, with the paid cheques. Immediately upon discovering the forgeries, the depositor notified the bank in writing of that fact and that the bank would be held responsible. In an action by the investment company to recover the aggregate of the cheques paid on the forged indorsements, the bank, among other defenses, asserted that the plaintiff was negligent because it did not examine more carefully the paid cheques as they were returned, and discover the forgeries sooner.

[4] *Espy v. Cincinnati Bank*, 18 Wall 614.

The court held that the depositor is not bound to examine the indorsements on returned cheques. He is bound, within a reasonable time, to ascertain the genuineness of the cheques themselves. Thus the California court made a distinction between the duty to examine indorsements, ordinarily made on the reverse side of a cheque, and the duty to examine the elements—the signature of the drawer, the name of the payee, the amount and the date, making up the body of the cheque, to determine forgeries therein.[5]

DEPOSITOR MUST EXERCISE REASONABLE CARE.—In another case it was said:

> The law of these cases in no wise conflicts with our own case of *Harter v. Mechs.' Natl. Bank*, 63 N. J. Law 578 . . . for it is apparent that the exercise of reasonable care and diligence in the examination of the accounts and vouchers in the case at bar would have discovered the errors and entitled the bank to information concerning them. . . . Now, in the case at bar there is testimony showing negligence in the depositor which raises an estoppel against it. . . .
>
> It was, however, laid down by the Supreme Court in the Pratt case that, the bank having paid the cheque (with forged indorsements), it could not charge the amount against the depositor, unless it showed a right to do so on the doctrine of estoppel or because of some negligence chargeable to the depositor. This is sound. It is in line with the decisions, and we approve it.[6]

NEGLIGENCE OF BANK.—In still another case it was said:

> It may require care and skill upon the part of the bank's officials to detect a forgery, and if it is shown that, in the exercise of care and skill, the forgery could have been discovered by the bank, but that the bank was negligent in failing to exercise such care and skill, then neglect upon the part of the depositor to examine the statement and cheques does not preclude the depositor's recovery.[7]

---

[5] *Los Angeles Investment Co. v. Home Savings Bank of Los Angeles*, 182 Pac. (Cal.) 293 (1919).

[6] *Pomonia Building and Loan Association v. West Side Trust Co. of Newark*, 108 Atl. (N. J.) 240. The case of *National Dredging Co. v. President, etc., of Farmers' Bank of State of Delaware*, 69 Atl. 607; 6 Pennevill's Delaware Reports 580, emphasizes the point that in the case of a bank having paid a forged cheque, the loss to the depositor should, in no event, be greater than that caused to the bank by his neglect of duty.

[7] *Farrell et al v. First Natl. Bank of Philadelphia*, 263 Fed. 778.

The various court decisions cited indicate the importance of prompt reconciliation of depositors' accounts with the bank statements or balanced pass-books and examination of the paid cheques returned by the bank. Any laxity in this respect by a client's staff should be brought to the client's attention by the auditor.

VERIFICATION OF DIFFERENCES.—When reconciling bank balances, the auditor should not overlook the necessity of verifying the differences making up the reconciliation. It is not sufficient to make up a reconciliation beginning with one balance, and listing the differences required to arrive at the other balance. The differences should be investigated in order to decide whether the items are bona fide open items, and, where possible, the open items should be verified by an examination of later entries and confirmed by correspondence or otherwise. It is particularly to be borne in mind that a subsequent entry which apparently offsets an item entering into the reconcilement is not of itself necessarily a conclusive proof of the correctness of the item; it might merely switch the item into some other account. Each such offsetting or adjusting entry, if for any material amount, must be carefully examined to make certain that it is a proper one.

"CANCELED" CHEQUES.—In a stock-broker's office the cashier drew cheques to the order of bearer, had them signed by a partner, diverted the proceeds to his own use, and destroyed the cheques when returned by the banks. The stubs of these cheques were marked "canceled." To make the reconciliation of the bank pass-book with the cheque book appear to be in order, he understated the footings of outstanding cheques by amounts equal to the shortage. Here the auditor would have discovered the fraud by personally balancing the bank account and securing direct confirmation of the bank balance. He also would have been put on notice by the absence of the cheques marked "canceled."

Cheques Not Returned.—The outstanding cheques listed to reconcile the bank balance should be compared with the actual cheques returned from the bank at a later date. Those which are not then returned should be specially investigated. The auditors should see that no cheques for cash purposes are drawn at the close of the period and entered in the next period.

Examination of Statement or Pass-Book.—Unless there is some special reason for so doing, the auditor need not verify the detailed statement or pass-book wherein are listed in detail the cheques paid by the bank. Particularly is this so when the auditor is able to secure the last settlement direct from the bank, or before anyone else has had access to it. If fraud exists and the signatures to cheques have been forged, or if cheques have been properly signed but for dishonest purposes, the inspection of the list of cheques paid by the bank will disclose that certain items were not entered on the regular stubs, and further investigation will lead to the discovery of the fraudulent practice.

It is evident, however, that if the auditor has direct confirmation of the closing balance and makes the verification of deposits and cheques referred to elsewhere herein, he will discover the fraud, unless of course the fraud occurred in a period for which the cheques were returned prior to time of audit.

5. Cash Receipts

In well-regulated concerns *all* cash receipts are deposited in bank, and all payments, therefore, must be made from the bank account. This almost disposes of the question of verifying the footings of the cash book. If the bank account is proved and if the cash receipts and payments are traced into and out of the bank, it is logical to prove the footings of the cash book automatically at the same time. If this does not seem to be complete verification, in a large business, the proving of every third or fourth page will be an adequate check.

When Receipts Are Not Deposited.—In every case, however, where there is any possibility of the receipt of any considerable amount of currency from sales over the counter, and where such receipts are not deposited daily in gross, there are opportunities for manipulation not possible under other circumstances. Consequently, the auditor must be specially vigilant in looking for fraud.

In one case the cashier failed, from time to time, to deposit a portion of the receipts from cash sales, although the correct amounts thereof were entered in the cash book daily. About once a year he concealed the amount embezzled by overstating payments for merchandise purchases. In an annual audit, made after the close of the year, it is difficult to detect such fraud except by comparing every cheque issued during the year with the cash book, or by examining every voucher, because it is not usual to attempt to verify the cash book balances at any date other than the closing date. Of course, if that had been done here it would have shown that the cash book balance was composed of a certain sum in bank and a very large amount "on hand." The size of the latter would have excited suspicion, but legal proof could hardly be found to sustain a claim that it was not in the cash drawer at the time.

Tampering with Cash Book.—In many small concerns the cashier handles the receipts, writes up the cash book, and makes the deposits. He might retain a portion of the receipts, force the footings of the column to agree with the actual deposit, and increase the footings of the discount column. The cash book would then balance across, the cash balance would agree with the amount shown by the pass-book, and, since the discount column would be posted in total by the bookkeeper, the ledger would be in balance without any falsification being made therein. If there are special columns provided for cash sales or similar earnings, the footings of such columns can be reduced by the amount of the shortage. They thus afford additional facilities for covering

up the amounts taken. If this possibility exists, the footings of the discount and similar columns should be verified.

Nominal Accounts.—The postings of the nominal accounts should usually be verified, not because there is any great danger of fraud lurking therein, but for the purpose of locating any possible posting to a wrong account. For instance, it frequently happens that part of a plant or old machinery has been sold. Sometimes such items are posted to an earning account instead of to a capital or a reserve account. These postings are, as a rule, few in number and are important enough to be verified *in extenso*.

Postings to Customers' Accounts.—The totals of postings to the credit of customers' accounts should be proved through the customers' controlling account. If there is no controlling account and if one cannot be constructed readily, a fair test should be made of the individual ledger credits, working, of course, from the ledger back to the cash book and not vice versa. The reason for this is obvious; if a customer has been credited with an amount which purports to have been posted from the cash book, but which as a matter of fact is not entered there at all, the discrepancy cannot be discovered by using the cash book as a basis, and it is not safe to depend on looking through the ledger subsequently to see that all items are ticked. It is sometimes suggested that the chief danger in such practice lies in the possibility that the ledger clerk can, if the work is not finished at a sitting, supply the tick marks himself. There is not much basis for this fear, but it is foolish needlessly to expose one's self to it.

If it is thought wise to verify the individual postings to the customers' accounts, do not check every one unless some very good ground for suspicion exists. If the audit is a periodical one, say, for six months, cover about half the letters of the alphabet at one time. Six months later cover the other half; or cover one-fourth only at each audit, and take two years to the entire list. Not infrequently, in case of fraud ledger credits do not appear

correspondingly as cash debits, but it is hard to imagine a case where a good test would not disclose the fraud. Very few men confine their peculations to customers whose names commence with X Y Z. The auditor can afford to assume that the defaulter will inadvertently manipulate the account of an A customer, in which case he will be detected the first time, while if he uses only one or two letters, he will still be detected in a reasonable time.

6. Cash Payments

On the payments side of the cash book it is also possible to cover fraud by erroneous footings. In most cash books there are special columns for different classes of expenses which are posted in total at the end of the month. If the cashier were to take an unnumbered cheque from the back of the book, or one of a style similar to those in current use, and have it drawn to his order or to some name representing himself, but does not enter the amount in the cash book, the footings could be falsified to that extent. The cheque could be numbered to correspond with those in use at the time. When the bank settlement is received and the balance verified, the cheque could be destroyed.

Accounting for Cheques.—Every cheque forming part of a series, or bearing any distinguishing mark connecting it with the concern under audit, should be accounted for. If spoiled, the half containing the serial number or other identifying mark should be preserved and pasted on the stub. Cheques should never be removed from the back of a book, but if they are, for some special reason, they should be accounted for.

Frequently these precautions are not enforced, due to ignorance or carelessness. In such cases the auditor should report thereon and suggest an immediate change relative thereto. If in subsequent audits no improvement is found, more severe criticism will be in order.

It is not easy to secure blank cheques bearing the name of a concern. For this reason hundreds of cases of fraud occur

through the improper use of cheques taken from the backs of books or from the front in their regular order. The stub, in these cases, indicates that the cheque was spoiled and destroyed.

Sometimes cheques are marked "void" on the stubs and the two halves of one cheque are pasted on two stubs (one of the portions, of course, being without a number), thus providing a cheque which is used by the cashier to obtain money fraudulently.

These manipulations are not likely to occur more than once in an auditor's experience, but all of the possibilities mentioned are based on actual experience, so that an auditor cannot afford to neglect all reasonable precautions to ascertain if such fraud exists.

ALL PAYMENTS BY CHEQUE.—The auditor should insist, wherever feasible, on having *all* payments represented by cheques. This reduces the possibility of manipulation of cash book footings to a minimum, and for this reason alone it is worth the trouble of depositing all currency receipts. If the footings cannot be proved by the bank account, verify, say, every third or fourth page.

VERIFYING POSTINGS.—If the cash book is properly columned and if a controlling account is kept with accounts payable, most of the postings then consist of monthly aggregates, which should be checked to see that they are not posted into the wrong ledger account. Here, however, it is important to avoid duplication. In many audits it is desirable to make full analyses of the various expense and purchase accounts for use in the reports. If feasible and convenient, this work should be done when postings are verified, as it obviates a second reference to the cash book pages if the details in the ledger are not sufficient.

Postings to the individual accounts need not be verified except for some special reason. The payments are supposed to be vouched to establish their authenticity, so it is not necessary to trace the payments to the debits of the accounts. A controlling account supported by a trial balance of the subsidiary ledger is a

good proof, but, even if this is *not* in evidence, the checking of the debit postings is usually superfluous work.

SUMMARY.—As against the practice—fairly common—of checking all postings and footings, the above course may seem radical. It is not radical, however, if it is approved after full discussion and thought, and if it stands the additional test of each particular audit. Where the slightest cause for suspicion exists, there must be a careful study of every phase of the situation. Even if suspicion has been aroused and there is a probability that something is wrong, the most foolish thing an auditor can do is to jump in blindly and tick every entry in the books. This has been done more than once, but the practice cannot be condemned too strongly.

7. Other Records

In many lines of business the books of account bear distinctive titles. Perhaps in the foregoing pages these books are not called by their technical names. For instance, in a magazine publishing business a sales book, so called, may not be found, but a subscription record and an advertising register are usually kept.

With these books, as to footings and postings, about the same procedure should be followed as with a regulation sales book—as a matter of fact, that is exactly what these two records represent—sales of advertising space and sales of copies of the publication for a stated period (subscriptions). It is far more satisfactory to have an illuminating title like this for a book than to attempt to cut down the number of account books in use and perhaps journalize every transaction. In addition to the saving of labor to a bookkeeper through the use of books for special purposes, the more important function is performed of keeping the records clear for one who does not understand bookkeeping. Most business men are at sea when they try to understand an ordinary journal, but if a book is labeled "subscription record," or "advertising register," anyone with ordinary intelligence knows exactly what to look for within its pages.

CHAPTER XXIV

THE DETAILED AUDIT—VERIFICATION OF INCOME

Accurate data is not available from which a dependable analysis of frauds could be compiled; nevertheless an estimate prepared from long experience is that nearly, if not quite, 75 per cent of all defalcations and frauds are connected directly with a failure to account for income or cash receipts, whereas less than 25 per cent of them take the form of diversion of cash after it has found its way into the treasury.

Fraud Connected with Receipts

We shall discuss the former type of fraud because it is more important. This, in turn, can be divided into two groups. The first group embraces that class of frauds which is characterized by the failure to enter in the books, or at least in the books which form a part of the double-entry system, any record whatever of the sale or delivery of goods or materials. The second class includes those cases in which a record of the original sale or delivery appears, but where the subsequent collection is omitted entirely or where the entry of collection is postponed until a later date. Obviously, the former methods are the ones most easily concealed. The auditor must therefore be especially vigilant in this part of the audit.

The auditor should secure a list of all books in use. This list should include not only the books which comprise the double-entry system, but also all those usually termed "memorandum" books, which contain original data, and from which the formal entries are compiled.

When the audit is completed the auditor should be able to certify that, in his opinion, all revenue or earnings have been properly accounted for. This does not mean that the cash which

was duly entered in the cash book, and the sales which were in due course entered in the sales records, are assumed to be *all* the cash receipts and *all* the sales without further investigation.

A careful inquiry should be made, or personal watch kept, to see who opens the mail, and what record, if any, is made by such person. The record, if a "memorandum" one, should be compared (in part) with the formal books.

SALES

The chief point of importance in the verification of sales is the gross amount of possible income; that which the auditor finds properly recorded in the books may be only part of the entire income. It is necessary to ascertain if any transactions have been omitted from the books.

Importance of Original Records

As a rule, some sort of record exists which can be compared with the cash book. The formal original records, which are nicely written up and which agree exactly with the other books, are not the ones the auditor wants. If he can find the first "originals," in rough form perhaps, and very dirty and almost illegible, he should use such records in preference to the fair copies, because the latter are frequently written up by the same men who write up the final cash records. Professional auditors agree that original records of this type reveal to them perhaps more instances of fraud than does any other source of information. Their importance for this purpose cannot, therefore, be overestimated.

Memorandum Books to Be Used.—The list of memorandum books required by the auditor should include the original records of sales and the original records of shipments. Rarely are the order books or shipment or delivery books considered as formal books of account. Perhaps it is fortunate for the auditor that this is so, because in many cases where the examination of

these records has revealed fraud, great astonishment and usually indignation have been expressed that an auditor should ask to see "memorandum" books. In most of these cases, had the defaulters suspected that the books mentioned would be called for, they could readily have destroyed or altered them before the examination occurred.

CASH SALES.—It is important to ascertain that all cash sales are accounted for. In nearly every business some sales are collected for at once and are not passed through the customers ledgers. If the general ledger shows few such transactions, this should not influence the auditor unless he has made inquiry from someone other than the cashier. In one instance the auditor found that practically no cash sales were accounted for. He inquired into this and was informed that it was not the custom to make such sales. Further investigation, however, developed the fact that the cash sales had been quite large, but that his first informant had pocketed the whole proceeds. In this case a rough memorandum was discovered which enabled the auditor to locate the entire shortage.

TESTS FOR SALES.—It is the auditor's duty to verify the income from sales as evidenced by the records or papers covering the transactions from the time an order is received until the goods are delivered. Wherever possible, therefore, he should secure the order books and compare some of them with the ledgers to see that the orders were filled. If not, why not? It may be that through carelessness an order was not filled and that it was not reported. Here is a good chance to be of positive value to the client.

Orders may have been filled and the proceeds collected but not accounted for. This should be discovered by comparing the shipping or delivery books with the sales records. Tests here are all that are necessary, because any system of fraud in this channel has been, in practically all known cases, continuous, so that a complete comparison for a few weeks or a month covers the point quite as well as a more exhaustive comparison.

While examining the sales book or original record, the auditor should satisfy himself that items representing shipments after the close of the period are not included prior thereto.

Trial Balance as an Aid.—A fruitful source of inspiration, in the effort to ascertain whether or not all the income has been accounted for, is the balance sheet—or the trial balance after closing, which may state the various items of assets in greater detail than the balance sheet. Proper thought should be devoted to each item to determine the possibility of the income therefrom being omitted from the books. For instance, a mining company's balance sheet may show that it owns workmen's houses. The auditor must then find out if all of the rents of *all* the houses have been accounted for. Furthermore, where there are tenants he usually finds that sales of coal or other fuel and all sorts of supplies have been made to them. If he does not find any record of such sales, he should inquire why from someone "higher up." He should not take the cashier's word for it.

These comments are merely suggestive and serve to illustrate the idea that the auditor must not use the receipt side of the cash book as a complete basis for verifying the actual income or receipts. He must work from every outside source he can find *to* the cash book. He will then be reasonably safe.

When Collections Are Not Accounted For.—There is not the same difficulty with those cases in which there is some record of a sale, in one of the original books of account, of which the subsequent collection of the proceeds has not been accounted for, or in which, although the sales have been debited in due course to customers, the collections have not been credited.

The former class can be disclosed by a good test of the footings of the sales records and by proving the postings of same to the customers ledgers. This has been fully covered. The instances in which credits have been arbitrarily made to customers' accounts, but without corresponding entry in the cash book, have also been covered.

Orders for Future Delivery

The auditor should investigate the orders for future delivery and make comparisons with such orders at the close of the previous year. Should there be a radical change in the volume of these orders, or should the bulk of the orders not be for immediate delivery, attention should be called to this fact in the report.

Consignments and Goods Out on " Memorandum "

Since carelessness is apt to exist in connection with all transactions which are out of the regular routine, the auditor should carefully inspect the records relating to charging out, keeping track of and collecting the proceeds of goods sent out on "memorandum" or "on sale." These are trade terms for consignments.

If not charged to the regular ledger account of the consignee (which may be inadvisable), the record of outstandings should be kept in a substantial loose-leaf binder equal in form and dignity to the ordinary customers ledgers.

It is necessary to create an impression of permanence about the records in an office, or else the data which are considered to be temporary will be kept in an unsatisfactory and careless manner.

The record should be looked upon as a running account. All freights, drayages, insurance, and other charges should be posted thereto as incurred. In support of the memorandum or temporary records in use, the auditor should be furnished with evidence that the terms and conditions are in order. Usually the correspondence relating thereto is sufficient, provided it carries the authority of one competent to fix such terms. A careful test of the accounting for the net proceeds as shown to be due by the record just described, should then be made. If the test proves that no loss is liable to have occurred, there is no necessity for a complete verification.

If consigned goods have not been accounted for when the books are closed, the consignee should be asked for an account current up to the date of closing. Based on this, credit may be

taken for the proceeds of sales actually made. The balance should be treated as stock-in-trade and valued on the basis described on page 116 *et seq.* Goods which have been charged out at selling prices and appear as accounts receivable must likewise have been treated as stock-in-trade and the valuation adjusted to the proper basis for balance sheet purposes.

Goods Received for Sale

If the concern under audit is the consignee, the accounts should be handled differently. If the goods received are to be sold on commission for account of the consignor, then the income consists of a commission on the selling price, or perhaps the gross amount realized above a certain fixed price, or some one of the many other understandings upon which consignments are received.

Contractual Relations.—The auditor must have access to the exact contract between the parties in order to test the accuracy of this income. In many cases the agreements are verbal or are based on correspondence more or less conflicting as to certain terms. Misunderstandings frequently arise between the consignor and the consignee, due principally to the failure of the minds to meet before the contractual relations commence. The auditor usually has an opportunity to urge the desirability of entering into an explicit contract at the outset and of furnishing a copy to the client's office, so that the terms and conditions of each consignment may be noted in the books. If a consignment is only partially disposed of when the books are closed, care must be taken that the unsold goods are not included in the inventory. A record of the quantities on hand should be made, but the values should be entered "in short" and a memorandum made to the effect that the items belong to the consignor.

Insurance.—Inquiry should be made as to whether such goods are insured, and if so, in whose name. If in the name of the consignee, the policies must contain a stipulation covering the facts of title.

PROFITS ON GOODS SOLD.—On lots partly disposed of, credit may be taken for the proportionate commission or profit on goods sold and delivered, but no income should be taken credit for on unsold or undelivered goods. In order to satisfy himself that the accounts are in order, the auditor should request that pro forma account sales be made up for all open consignments. The quantities not yet disposed of should be checked with the inventories and the accrued earnings should also be verified.

CHARGES TO CONSIGNOR.—The account sales should be scrutinized in order to see that all legitimate charges are made to the consignor. Commissions and freights are not usually forgotten, but careless clerks do not always include insurance, cartage, allowances, and similar items which may be permissible. Other items, such as extra charges for special services, postage, etc., may not be thought of, but since items of this nature are charged by some commission houses, it is always pertinent to inquire whether the matter has had full consideration.

Sales Not Delivered

In closing books there seems to be a temptation on the part of most concerns to anticipate all profits in sight. Therefore, if sales have been made for future delivery, the tendency is to charge the goods and create an account receivable or make some adjustment of the income account in order to include the profit which it is expected will be realized. Conservative business men follow this course only in exceptional cases, and when the accounts clearly disclose the amount of profits anticipated. In a going business, during normal times no adjustment should be made of orders not delivered.

In the automobile trade, for instance, sales are effected and substantial deposits or part payments are received long before the cars are delivered. But no profit has been realized nor may ever be realized, so that the inclusion of this hoped-for profit in an income account is absolutely wrong. Thousands

of such sales are never consummated by reason of the failure of the factories to build the cars; sales are canceled and the deposits returned, and none of the expenses incurred thereby are compensated for.

In other cases the goods may be on hand or in process of manufacture, so that the expectation of being able to deliver is based on a sounder hypothesis, but the rule is precisely the same. No profit should be taken until a delivery or a tender has been made and the sale is converted into a valid claim against a solvent debtor, except when special circumstances, such as general practice in a particular industry, justify the practice.

Expenses of Future Sales.—There is some merit in the contention that if sales for future delivery have been made, and the goods are on hand ready to ship, the goods may in any event be inventoried at something more than manufacturing cost. That is, the expenses of sale having been incurred to this extent, the period in which delivery is made should be forced to bear its share of the burden, and such expenses should be carried forward as an asset under the caption "deferred charges to operations." These may include such sales expenses as commissions, salaries, advertising and traveling expenses, etc., but must not include any part of fixed charges such as rent, administration expenses, etc.

Advances and Deposits.—If part of the sales price has been collected in advance or deposits have been received, such items should be separately stated on the balance sheets, because they do not constitute trade liabilities, but, on the contrary, are evidences of prospective profits. There may be many a slip between the order and the profitable closing of the transaction, as Judge Clark said in the American Malting case:[1]

> These contracts were to deliver at a future time a product not yet made, from raw material, not yet purchased, with the aid of labor not yet expended. The price agreed to be paid at that future time had to cover all

[1] *Hutchinson v. Curtiss* (1904), 92 N. Y. S. 70; 45 Misc. Rep. 484.

the possible contingencies of the market in the meanwhile and might show a profit, and ran the chance of showing a loss. . . . You cannot make a dividend of a hope based upon an expectation.

Cash Discounts

The auditor should secure from the principals an authoritative statement of cash discounts allowed to customers. With this as a basis, a fairly exhaustive test should be made of the discount deductions or allowances as stated in the cash book. In rare cases the cash book shows net receipts only, in which event discounts are credited through an allowance book or journal; but since the latter method involves writing customers' names twice, no up-to-date concern permits it. The discounts should appear in a column on the *receipt* side of the cash book, next to the column containing the gross or net collections from customers.

For convenience in posting, the gross amount is sometimes entered in the "accounts receivable" column. The total of the discount column must then be deducted from it in order to arrive at the cash balance. It is better practice to enter the net cash collection in one column and the amount of the discount in the next. In posting, the two amounts should be entered " in short" on the credit side of the customer's account and the gross amount should be extended to the money column.

Instances are known in which cashiers have systematically overstated the discount allowance, either by increasing the amount actually deducted or by entering a discount where none was claimed or allowed. This is a matter to which little attention is directed in an establishment in which the work of cashier and bookkeeper is performed by the same person, or in which the posting clerks are mere machines, and can be depended upon to overlook fraud of this nature. In view of this probable freedom from detection and the numerous frauds which have thus occurred, the auditor must make a test thorough enough to satisfy himself fully. If there is anything wrong it is likely that it will appear frequently, so that the test, while exhaustive as to

the period covered, need extend over only a few days or weeks, depending on the volume of collections.

Collections Not Accounted For

We now come to what is believed to be the most prolific source of fraud practiced, viz., the failure to enter in any book the collections from customers. The detection of such fraud is difficult. Therefore it will pay to devote considerable time and space to the subject.

ILLUSTRATIONS.—The most common irregularity is illustrated as follows: Customer A, on January 2, pays $112.53, say, by cheque. The cashier fails to enter the collection in his books. If he has made other collections in currency exceeding $112.53, he deposits the cheque and takes the equivalent in currency from the drawer, thus obviating the necessity of forging the indorsement and having the cheque cashed, although the latter method is more common than is generally supposed. In the first case the fraud can be discovered by comparing the details of the cash receipts with the details of the bank deposits as listed in the cheque stubs or copy books; but this record is not always available and, moreover, auditors frequently find that where such a fraudulent practice exists the record of the bank deposit has been altered or made up to correspond with the cash book, which makes the comparison of no value. In one instance a cashier borrowed a stamp from the bank and stamped some deposit tickets which he fraudulently used. It is always dangerous to accept duplicate deposit tickets as final evidence of money deposited in clients' banks.

In most such cases the thief does not consider it safe to hold out collections too long for fear that somebody in the office will discover that customer A has not paid and so try to collect from him. Therefore, on January 31, he decides that it is not wise to hold up A's credit any longer. He accordingly credits him with $112.53 in the cash book. This amount finds its way to the

ledger in due course. By this time the cashier is deeper in trouble. Customer B having, on January 31, paid $250 (also by cheque), the cashier fails to enter the amount and thus creates a cash "over" of $137.47, which he removes from the cash drawer as soon as he can accumulate that amount of currency. Here again is urged the importance of recommending to clients the daily deposit of all receipts—currency and cheques. When this is done there is far less opportunity for fraud afforded to a clerk dishonestly inclined.

So it continues. The defaulter must soon credit B with $250, and he therefore calls on C's account; or, by this time, A may have paid again. Always the amount grows larger and larger until in many cases the discovery is forced without the aid of an outside auditor. Usually, however, it goes on for years. Unfortunately such practice has more than once been in full force during, prior to, and subsequent to, periodical audits by public accountants.

Confirmations of Outstandings

The auditor can best detect such defalcations by sending statements to all customers, requesting them to confirm the accuracy of the balance on a blank inclosed for the purpose, which in turn is to be returned direct to the auditor's office. This practice is followed by many leading auditors. Therefore, if the client does not or will not consent to such a course, the responsibility for the integrity of the customers' balances is squarely up to him. The objections to this practice grow fewer each year. No doubt within a few years the verification of customers' outstanding balances by correspondence with the auditor will be the rule rather than the exception.

The old form was substantially as follows:

DEAR SIRS:

In making our periodical audit of the accounts of..... we desire to verify the accounts receivable by direct correspondence with

each customer, and we are therefore sending you (attached below) a memorandum of your balance, which we would ask you to kindly compare with your books, advising us as to its correctness or otherwise.

If the balance does not agree, please inform us fully as to the reason and amount of the differences.

A stamped envelope is inclosed for use in replying.

Very truly yours,

.....

Certified Public Accountants.

.....Perforations here.....

No..... .....19 ....

The balance of $..... under date of.....

charged against my account on the books of.....is correct.

Very truly yours,

The above form, or some variation of it, was used extensively for several years, but it was found to be expensive and not entirely satisfactory. In fact, if balances are correct there is no necessity for an acknowledgment.

The most popular form at present is as follows:

PLEASE EXAMINE

this Statement carefully. If it is not correct, please communicate DIRECT with our Auditors,

LYBRAND, ROSS BROS. & MONTGOMERY

55 LIBERTY ST., NEW YORK,

giving full details of any differences.

This rubber stamp is used on the regular statement forms of the concern under audit and is more effective than any other method.

It is advisable for the auditor to furnish to the client envelopes having on them the auditor's return address; otherwise statements of accounts apparently genuine, but actually fictitious, may be returned to the client's office undelivered by the post-office, and thus reach the clerk responsible for the fictitious accounts. If this happens, the clerk will, of course, destroy the envelope and statement.

PREPARATION OF CUSTOMERS' STATEMENTS.—The statements are prepared in the client's office in the usual manner—not by the auditor. The latter, however, should compare balances with ledger accounts before mailing and the mailing should be done by the auditor. For some accounts no statements are sent. A list of these should be prepared and approved by the proper authority. Some auditors object to this procedure on the ground that customers who are in the habit of visiting the client's place of business are apt to disregard the request to take up differences directly with the auditor but will in most cases report any discrepancies directly to the bookkeeper. Even if customers are not in the habit of calling at the client's office, they insist on writing directly to his office concerning their accounts, because they do not appreciate the value of an independdent check. The auditor, therefore, cannot depend on having reported to him all discrepancies in customers' accounts through the plan suggested above. As a practical matter, however, the scheme will bring to light any systematic fraud, because all customers do not object to communicating direct with an auditor. If a bookkeeper has been systematically manipulating customers' accounts, one or more customers will so advise the auditor. He is then put on notice and other instances of fraud should be looked for.

VALUE OF THIS CHECK.—This independent check is of value not only in the disclosure of fraud, but also because of the information which it gives as to the condition of the accounts with respect to unadjusted items, allowances, etc. It is needless to say that some bookkeepers are careless and others lazy. When this is so, it is important for the auditor to find it out. In all classes of business various claims and errors crop out from time to time. When these affect customers' accounts, adjusting entries should be made at once, otherwise the outstanding balances do not reflect the true state of the accounts. If a bookkeeper *is* lazy or careless, it will soon develop in the replies from customers

to the requests for confirmations. In several instances this inquiry has demonstrated a very unsatisfactory condition the cause of which was not fraud but carelessness. In many instances, however, carelessness leads to fraud.

Whenever the auditor can check loose methods, he may really be preventing fraud. The auditor who prevents fraud is a very useful person.

It is impossible, in limited space, to suggest more than an outline of the procedure to be followed, to ascertain that all income is accounted for. The very nature of a business suggests to an intelligent auditor practically every source of revenue, special and ordinary.

INCOME FROM INVESTMENTS

As mentioned elsewhere, mercantile and manufacturing firms and corporations frequently invest part of their surplus in income-bearing securities. Since these investments are unusual transactions, the income from them is not usually subjected to internal audit.

The auditor should obtain a schedule of all securities held during the period of the audit and should ascertain that all dividends or interest accruing on them are properly accounted for. If any of the investments are in inactive stocks and if the dividends thereon are irregular and cannot be verified through the usual channels, a schedule of collections should be compiled and submitted for approval to someone in authority.

If the investments are all grouped in one account, attention should be called to the desirability of opening a separate account with each one, and of noting at the top of the page full particulars as to the serial numbers of the bonds or stock certificates, together with interest or dividend dates and similar information. If numerous, it is best to have a subsidiary ledger or record for these details.

Interest Receivable

Under "Interest and Collection Charges" (page 563) and in Chapter XXIX, it is shown that considerable carelessness exists with respect to the collection and payment of interest, and attention is also called to the danger of accepting bankers' figures as infallible.

Interest on mortgage investments should be verified, as shown under "Income from Investments" (page 528).

The auditor should analyze the account for interest received and should separate that part which is exempt from federal or other taxation from other interest, even if he is not preparing the income tax return.

Interest on loans where the interest rate and other conditions are not always fixed in advance demands especial attention. Few businesses exist, particularly among those conducted by firms and individuals, where private loans or advances do not appear. These may be to friends, or to business associates, or to employees, or to customers who request temporary accommodations. More frequently they represent investments entirely outside the business and in connection with enterprises about which little is known.

Any auditor who has had long experience can recall innumerable instances where men have made fortunes in their own business and have squandered their entire surplus, and oftentime most of their capital, in mines, plantations, patents, and all sorts of industrial flotations about which they had no technical knowledge whatever.

Frequently these outside ventures commence in the form of small loans. Here the auditor can sometimes be of real service to his client. The client should be impressed with the necessity of keeping his own capital intact, and of not making so-called investments in the form of loans to others while borrowing himself. The auditor should point out to the client that he is not a banker, that if loans or advances are made to others, interest thereon at current rates should be paid promptly, and that the loans should be cleaned up or materially reduced periodically—

just as is required by a banker. Considerable space is devoted to this matter here because borrowers of this class do not, as a rule, pay interest promptly, and the failure to make such collections will give an auditor a good opportunity to criticize unbusinesslike practices.

Interest on bank deposits is not often investigated, yet it may be that a rate of only 2 per cent is received when 2 1/2 or 3 per cent may have been arranged. Therefore the auditor should always verify the rate actually in force. A rough estimate can usually be made of the amount credited on balances. Cheques issued follow a well-defined course, except in special cases, so that the test of a month or two, based on average daily balances will disclose whether or not the amount received is approximately correct. Frequently the auditor can have these figures compiled by one of the office staff and thus reduce to a minimum the time he himself must spend thereon.

Rents Receivable

If the item of income from rentals is inconsiderable, the records relating to it are not apt to be in good condition for auditing.

List of Property.—In the first place a complete list of all rentable property is essential. Next in importance is a schedule of rentals which should be received therefrom. With these two points covered, the auditor can make a satisfactory audit. The premises should be inspected and note made of vacancies, if any. Vacancies during the period should be listed and verification of them secured from some source independent of the clerk in charge of the collections.

The author had nearly completed the audit of a small railroad company when this question arose. The balance sheet disclosed the ownership of some rentable buildings. When asked for the records relating thereto, the treasurer attempted to defer the inquiry, but after a list was secured and the possible income

calculated, he confessed that he had misappropriated most of the rent collections. The amount was comparatively small—a few hundred dollars out of total income of several millions—but the ordinary income was controlled and checked by other departments, so he seized the only opportunity for fraud which seemed safe.

When Agents Are Employed.—Where collections are in the hands of reputable agents, who render periodical statements, it is not necessary to check the income in so much detail; but careful inquiry should be made to satisfy the auditor that the agent has charge of *all* the property, and that the statements, when received, are checked both as to collections and deductions. It is obvious that the auditor will trace into the cash receipts the total amount turned over by the agent for the entire period, and, if there is the slightest doubt as to the genuineness of the statements submitted, the auditor should request the agent to hand him a memorandum of payments for the period.

Income from Securities Bearing Low Rate of Interest.—As compared with twenty years ago, the going rate of interest has about doubled. At that time good 3 1/2 per cent bonds freely sold at par. Today low rate bonds sell at a considerable discount. The question arises as to the proper treatment of the discount. When bonds and similar obligations are purchased at a considerable discount, the first inquiry of the auditor should be as to the rate of interest. When the stated rate is under the market or effective rate, it can properly be assumed that such part of the discount as can be ascribed thereto should be amortized and periodically credited to income. When the discount can be ascribed to apprehension as to the safety of the principal the security should be dealt with as a speculative investment and no credit be made to income unless or until the situation changes. If the apprehension proves not to be well founded, the discount should be amortized; if the situation changes for the worse, the book value should be written down.

From an accounting point of view, the accrual system demands that each fiscal period shall contain the charges and credits which belong to it. Expediency will sanction the postponement of profit-taking until realization takes place; but expediency may result in inaccurate balance sheets and income accounts.

MISCELLANEOUS INCOME

It is not practicable nor necessary to discuss in detail all classes of income which arise in various lines of business. The following classes are illustrative of the procedure to be followed in the case of any special class of income. In addition there are possible items of income which are general in their nature.

Discount for Prepayment

There is some difference between interest received from customers on notes receivable and cash discounts allowed by creditors for prompt or anticipated cash payments, although theoretically they both represent a profit or return upon the capital invested in the business. Interest received on notes is almost invariably calculated at the legal rate of interest and is, in effect, an offset to the interest paid upon money borrowed. This becomes apparent if we consider the possibility of discounting the notes receivable, for in that case the interest on the notes is added to the face of the notes and the bank discount is deducted therefrom. It is not customary or necessary to credit the interest to one account and to charge the discount to another account.

The rate of interest allowed for prepayments, however, is purely arbitrary and fluctuates to a considerable extent. Most concerns wish to know the amount realized from this source. A separate ledger account should be kept for it.

As an indication of some of the rates of cash discount which are allowed, the following were given in replies made by manu-

facturers in May, 1921, to a query of the Merchants' Association of New York:

Baby Vehicles:	2%—30 days	60 days net
Biscuits and Crackers:	1%—10 days	
Chairs:	2%—30 days (or less)	
Chemicals:	No uniform practice	
Chewing gum:	½%—30 days	
Confectionery:	2%—10 days	30 days net
Cooperage:		30 days net
Feed:	No discounts allowed	
Flint and Lime Glass:	1%—15 days	30 days net (from date of invoice)
Gears:	1%—10 days	30 days net
Automotive branch	2%—10 days	30 days net
Large gear or mill work:		usually 30 days net
Glue and Gelatine:	2%—10 days	30 days net
(Some few	1%—10 days)	
Hardware: (small)	2%—10 days	60 days net
Horn and Celluloid:	2%—10 days (Sometimes 30 days extra)	30-60 days net
Malleable Castings:	No discounts allowed	
Medicinal chemicals and essential oils (deal only with wholesalers):	1%—10 days	30 days net
Paints and Oils:	1%—10 days	30 days net (or less)
Pharmaceuticals:	2%—10 days	60 days net
Stamps:	1%—10 days	30 days net
Some mfrs.	2%—10 days	
Many of largest mfrs.		10 days net
Stoves:	2%—10 days	30 days net (or 60 days with trade acceptance)
Surgical dressings:	1%—10 days	30 days net
Varnishes:	2%—10 days	60 days net (or less)

TRADE DISCOUNTS.—Trade discounts should be deducted directly from purchases on the one hand and from sales on the other. That is, no ledger account should be kept for trade discounts. The term itself rarely appears in books of account.

The test of a trade discount is the rate. In some lines of business a discount of 7 per cent is allowed for payment within thirty days. This is not a cash discount, for no business house would pay that rate for money. Therefore the concern which receives the discount cannot credit it to interest. Frequently, moreover, notes are given; the 7 per cent is deducted from the face of the bill and interest at the rate of 6 per cent per annum is added to the balance for the term of the note. This clearly shows that the deduction represents a trade, not a cash, discount.

The distinction, therefore, is based on the answer to the query: Is the rate one which is obviously granted for anticipation of obligations not due? For instance, the strict enforcement of the discount terms "2 per cent ten days, net thirty days" indicates that the 2 per cent is an earning and not a deduction from the purchase price. As a general rule any discount in excess of the terms just mentioned may be treated as a trade discount.

Realizations from Items Previously Charged to Income

Among the miscellaneous items of income which may be found in almost any business, and to which the auditor should pay particular attention (chiefly because such attention may not be expected), are realizations from assets made subsequent to the time when such assets were charged off to income as uncollectible. The procedure is not so difficult as it appears at first sight, because the number of debits to income over a period of years is not usually very great. Moreover, since only a small proportion of these items can, in any event, admit of a subsequent realization, it is not much of a task for an auditor to analyze the "possible" items and scrutinize them solely to ascertain probable or possible collections.

Customers' accounts are the most prolific source of delayed realization because they are often written off after bankruptcy proceedings are instituted, and before the final dividend is paid.

Some bankruptcies extend over a long period of years, so that

every such account written off should show beyond any doubt that a *final* dividend has been received. Where accounts have been written off without any evidence that bankruptcy proceedings were ever started, the written authority for such action should be submitted to the auditor.

Stocks, bonds, loans receivable, and similar items are sometimes written off before the properties or persons responsible are finally adjudicated bankrupt or otherwise definitely declared to be hopeless. This line of inquiry does not require much time but experience has proved its worth.

Sales of Building Lots

In the audit of a land or real estate company, it should at once occur to the auditor that he must look carefully for receipts from sales of building lots. Now the last places to examine are the receipt side of the cash book and the sales book or other record of the sales. Yet when he asks for a record of sales, it is these to which he is directed. At least nine out of ten times the client expects him to take these records as starting points rather than to consider such a record as a goal *toward* which he is working.

There probably never has been a land company which did not issue a map of its property nicely marked off into lots with a number and block for every lot. What is simpler than for the auditor to take a map and one of the printed price lists usually available and proceed to account for every lot? All lots sold for less than list price should pass inspection by a duly authorized officer. All lots not accounted for as sold should be on the "for sale" list or else specified as being set apart for particular purposes. These purposes should be evidenced by resolutions of the board of directors or other authority properly expressed.

Since most lots are sold on the instalment plan, the auditor should look for collections of interest on the deferred instalments and should require that every such item be accounted for.

Thus through the rather simple process of most business enterprises it is possible to *think* out the sources of revenue in-

stead of using the books as a guide. By so doing the auditor avoids the danger of being influenced by the entries shown therein and thus of losing sight of the fact that those entries are not all which *should* appear.

Services and Other Charges Billed in Advance

Verification of income from subscriptions or other items representing charges for services or goods to be furnished or delivered at regular intervals, requires careful examination of the amount charged in order to determine what part of it has actually been earned. For instance, suppose that a contract is made on January 1 to furnish a monthly service for, say, $600 per annum, which is to be collected in one amount. Let us assume that on March 1 the amount is still uncollected. There is then an account receivable of $600 against which there should be set up a reserve of $500 for that part of the contract which is unearned on March 1. In this case the situation does not possibly warrant stating the transaction net, as an account receivable of $100.

Income from Corporation's Own Issues

Oftentimes the securities of a corporation, such as bonds and notes, are purchased for the account of the issuing corporation by trustees, to whom the corporation transfers funds under sinking fund or other trust agreements. For purposes of accounting between the corporation and its creditors it is necessary to treat such a transaction, including the income from the securities purchased, as if the corporation were dealing with securities not issued by itself. The procedure must, of course, be governed by the terms of the agreement. Usually the income is added to the funds in the hands of the trustees and does not return to the corporation's own treasury. The benefit to the corporation lies in the discharge of its obligations.

Aside from the contractual obligations existing between corporation and trustee, such transactions require attention from the point of view of good accounting practice. A corporation

cannot receive income from itself; therefore, interest on its bonds which is paid to trustees who hold the title to the bonds for the sole account of the corporation which issues them, is a payment and receipt of interest only in so far as the trustees are concerned. This point is of importance in tax and other questions. There should be no great difficulty in settling any specific question so long as no attempt is made to treat corporation and trustees as separate entities, except in so far as the agreement between them is concerned.

CHAPTER XXV

THE DETAILED AUDIT—PURCHASES AND EXPENSES

Auditors have given altogether too much attention to the forms and evidences of payments and too little attention to the purposes of the payments and the content of vouchers. The United States Treasury spends hundreds of thousands of dollars annually and compels other departments of the government to spend even greater sums in securing peculiar (almost weird) forms of vouchers. Disallowances due to informalities are made aggregating hundreds of millions of dollars, taking up the time of competent clerks who should be empowered to ignore the form and investigate the substance of the expenditures. In many, perhaps most, cases of fraud routine methods are followed and standard forms are used; the dishonest person is more concerned with formality than is the honest person. It is not likely that many persons will attempt to defraud the government or anyone else by the use of obviously insufficient vouchers.

Therefore, the best advice regarding the verification of expenditures is to subordinate form and devote special attention to the purpose and the necessity of all payments.

VOUCHERS

It must be admitted that the examination of vouchers is necessary and valuable, but with respect to *relative* importance, such work should be placed toward the end of the list. If a careful comparison of vouchers with cash books would disclose improper or extravagant purchases or expenses, the very considerable work involved would be justified; but unfortunately the ordinary voucher, so-called, is usually little more than a receipt for a given sum of money and is usually of so little prac-

tical use that many concerns never insist on vouchers nor do they preserve them when they are furnished.

Procedure

Of course, this is a matter which should not be discussed with anyone whose accounts are being audited. Where vouchers are taken, an auditor should call for vouchers covering all payments and require that they be arranged in order to correspond with the cash book entries. He should not allow it to be known that there is any probability of his not checking any part of the vouchers, or else it will be difficult to secure them properly and have them arranged in order. If a cheque bears on its face or back any indication of its purpose, it is the best receipt for money paid that can be secured. If it bears no evidence of its purpose, but can be readily identified with a particular bill or invoice, it still is a better voucher than a receipted bill. The comparison of vouchers with a cash book without the identification of the entries in the cash book with the cheques is worse than negligence; since the sole purpose of vouching cash is to ascertain, as nearly as possible, that the payments represent an equivalent in value to the payers and that the equivalent—that is, the discharge of a like liability—is received when the cash is paid. A mere receipt for so much money, which can readily be forged, is poor evidence of a legitimate payment; but a paid cheque, properly indorsed and otherwise identified as representing the payment of a definite liability, is pretty fair proof that the money has reached a creditor. If the auditor follows it up by a careful scrutiny of the documents supporting the cheque, he is on the right track.

Paid Cheques as Evidence

It must be remembered, however, that a paid cheque unsupported by other documents is not conclusive evidence of the propriety of a payment. This is well illustrated by the following instance in the author's experience:

The accounts of a district school board which had passed out

of existence were to be audited. Only a small amount of funds was handled, the total collection of taxes for district school purposes being about $15,000 per annum. The records submitted to the auditors were fairly complete, with the exception that no paid bills were turned over to the new board. The paid cheques, however, were intact, the cash book had been well kept, with some attempts at classification of expenditures, and the minute book contained complete lists of all the bills approved for payment by the board at its meeting.

Every disbursement recorded in the cash book was found to be supported by a paid cheque, and all the payments had been duly authorized by the board. Most of the payments were of very moderate amounts. Thus far everything appeared to be in order. Practically nothing had been seen to arouse the auditor's suspicions. Several payments, each for a little less than $150, had, however, been made to a wholesale drug house and to a pharmacist, respectively. The auditors could not think what articles aside from sponges would be purchased from these sources, and decided to obtain duplicate bills in order to ascertain the nature of the articles purchased. The request for such bills was in both cases met with the reply that no payment of the amount mentioned had been received from the school board. Further investigation developed the fact that the indorsements on the cheques had been forged, which fact the auditor could not have determined from an examination of the cheques themselves since they bore evidence of having passed through bank in the usual way. It finally developed that the indorsements had been forged by a member of the school board.

Certified Bills as Evidence.—Furthermore, even a bill certified as to receipt of the articles shown thereon, approved for payment by the authorized officials, and evidenced as to actual payment by an indorsed cheque which has passed through bank in the regular manner, may not be conclusive evidence of the honesty of a transaction. Another school board (not the one

mentioned in the preceding paragraphs) had purchased a piano for $450. The documents supporting the payment were all in regular order, and the piano itself was in existence as proof of the fact that the article charged for on the bill had actually been received. The auditors, however, made a personal visit to the store where the piano had been purchased and without revealing their identity made inquiries as to the prices of various styles of pianos. They were offered exactly the same style of piano for which the school board had paid $450 for $275, and this without any "haggling" over the price. The piano concern later admitted that when it received the school board's cheque for $450, it (the piano concern) paid $200 in currency to the bearer of the cheque. Of course, the "refund" never found its way back into the school board treasury.

When Paid Cheques Are Sufficient.—In small concerns many items of payment are posted direct to expense and other general ledger accounts. The vouchers for such items should include complete evidence of their genuineness. The best vouchers for payments posted direct to personal accounts are the paid indorsed cheques, because the credit side of the personal ledger accounts will have been compared with the original invoices; consequently, very little evidence of the discharge of the obligation is required.

An auditor can greatly assist his client by looking into the various operations surrounding a payment as well as by passing on the question of whether or not it is a bona fide transaction.

Purchase Invoices

The bill or invoice should bear on its face all marks or initials needed to indicate that the goods or materials were received in proper quality and quantity; that they were as ordered, which includes an approval of the price, provided it was recorded at the time the order was given, or an approval by a responsible and authorized official if the price was not fixed in advance; that if

the quotation was "delivery free," freight was not paid, or, if paid, has been charged back to the vendor; that where custom permits or any other indication appears of a cash discount being in order, it was deducted; that in all other respects the purchase was in order, including the checking of the calculations, the notations as to the department or account to be charged, etc.

TEST OF PURCHASING DEPARTMENT.—Many large establishments have purchasing departments which assemble more or less complete data comprising quotations on practically all the commodities purchased. In such cases the auditor should make a test of such records to determine whether the purchasing department appears to be buying at the lowest possible prices.

Internal Check

Inquiry should be made as to whether the receiving clerks keep an independent record of all goods received irrespective of invoices to cover, and whether the subsequent comparison of these records is carried out intelligently and completely.

As stated above, these invoices should be throughly tested to ascertain the internal method of checking their accuracy; but the auditor should never, as a matter of course, attempt to verify the whole of the purchase vouchers unless he has a further purpose in view than to "audit the books." In a large concern the auditor does not think of examining every purchase invoice. He makes copious tests and, if nothing suspicious is discovered, is willing to certify that the accounts are correct. An auditor should not inspect every voucher, even in a small establishment, unless there is some special reason for doing so.

What Vouchers to Examine

There are many more important things to do in an audit, and the time spent on vouchers must bear a proper relation to the time used for other purposes and to the fee, if the latter is to be fair to both auditor and client. Some books and articles on au-

diting recommend the examination of all vouchers. These books, however, are not based on successful experience or upon a proper realization of the service which the client is entitled to receive.

If a system of internal check is in force, it is not necessary to inspect every invoice; a complete test should be made to see that there is a strict compliance with the rule heretofore mentioned, but this test is completed by selecting, say, three or four months out of twelve and examining each item, always including the last month of the period. The auditor should then look over the cash book very carefully for the other eight or nine months, and in connection with his analysis of the ledger accounts he can note any unusual or suspicious-looking item and call for the voucher covering it. This obviates the necessity of checking over the mass of documents which, he has satisfied himself by his general test, represent purchases for the proper and ordinary purposes of his client. The scrutiny of the ledger accounts, or analysis if necessary, is important if charges have been made to plant accounts. These must always be supported by proper vouchers.

ILLUSTRATIONS.—In a bankruptcy case it was found that the proprietors had personally withdrawn large sums and had made it appear on the books that equivalent amounts were expended for merchandise. Cheques and cash received from customers were entered in the cash book and from them credits were posted to customers' accounts. The remittances themselves were deposited, not in the company's regular bank account, but in a secret bank in another state. This latter bank account was used for the personal benefit of the proprietors. To keep the company's bank account in balance, regular cheques were drawn to the order of fictitious creditors, to agree with the entries in the cash book for the customers' cheques. These were indorsed, taken to the bank and deposited in the regular account. The creditors' accounts were debited with the cash purported to be paid to them, and credited with the fictitious purchase items.

In a defalcation amounting to over $20,000, the cashier, in

order to conceal the embezzlement of cash sales, drew cheques to legitimate creditors for amounts due, and entered the payments in the cash book $1,000 in excess of the correct amounts. The fraud would have been discovered by comparing the cheque stubs with the cash book, or by vouching all payments. Usually, however, the cashier selected but one or two months in each year for the fraudulent entries, so that an auditor who selected a few months' work out of the twelve for a test, might overlook the dishonest entries. The cashier's procedure was as follows:

The bank account was first reconciled with the correct amounts appearing on the stubs, after which the stubs were raised to agree with the larger amounts in the cash book. The fiscal year of the concern ended February 28. The sum of $22,800 was covered up as follows:

Cheques to creditors were entered in the cash book, each $1,000 greater than the correct amount:

1910, May, one item
1911, Jan., one item
1911, Oct., two items
1914, Jan., five items
1914, Dec., five items

The cash book balance was carried forward to the beginning of the next month insufficient by $3,000. Since this would throw the books out of balance, the debit footing of the merchandise account in the general ledger was increased $3,000. The footing of the "merchandise purchased" column on the payment side of cash book was raised $2,000. The cash book balance was reduced $3,800, and the debit item of merchandise purchased, in the journal, was increased $3,800. The credit posting to the creditors' accounts was for the correct amount, i.e., $3,800 less than the entry first called for.

When Extra Precaution Is Required.—In making the test, care must be taken to ascertain that bills are made out to

the concern under audit and not to its officers or clerks. Of course, if the disposition of the things purchased is checked, such an irregularity is disclosed.

The names of the payees may be those with whom the clerks, as well as the concern itself, may possibly be dealing. In such cases some extra precaution should be used in examining the original invoices. For instance, a cheque drawn to the order of and indorsed by a department store or a tax collector is not sufficient evidence as to the propriety of the payment. If original invoices of this nature are said to be missing, duplicates should be requested and the auditor should not be put off with any excuse.

It is important to know not only that the entries purporting to represent purchases made are proper, but that all invoices for purchases actually made have been entered previously to closing the books. This can be quite satisfactorily tested where there is adequate system of recording purchase orders issued, of keeping record of incoming goods, and of checking invoices against order and receiving records. The comparison of creditors' statements with the accounts payable record should under ordinary circumstances also enable the auditor to detect the omission of purchase invoices.

Irish Woolen Mill Case

In the case of *Irish Woolen Mill Company, Ltd., v. Tyson and others*,[1] the auditor was held liable for negligence because he failed to detect the intentional omission of purchase invoices when the books were closed and the subsequent entry of the invoices in the following fiscal period. The purpose of the company's secretary was to make a better showing than its operations and financial condition justified. The court held that the auditor, who had made monthly audits for a number of years, should have had his suspicions aroused by the fact that invoices were charged into each period which, according to their date, belonged

[1] Acct. L. R., 1900, p. 13 (Irish Court of Appeal, January 20, 1900).

in a previous period, and that had he then made the investigation which this suspicious circumstance called for, the fraud would have been detected.

Missing Vouchers

These are a source of much needless work to many auditors. If in an audit no evidence whatever of fraud is found, and if the payments for which vouchers are not submitted appear in every way to be regular, it is usually a waste of time to list them in detail, and consume a lot of time locating them. In most cases they will not be found, since many vouchers are never returned or are mislaid or lost in the mails.

No specific rule can be formulated for treating missing vouchers, but the author wishes to go on record as opposed to the contention of some auditors who regard this point as a very serious one in every audit. The experience of the author confirms his belief that where a cashier enters an irregular or wholly fictitious payment, he is always sure to have a voucher to cover.

Vouchers for Petty Cash Payments, Pay-Roll, etc.

Where payments are made for expenses, wages, and similar purposes, and where there is no ledger account with the payee, great care must be taken to ascertain that the amounts have not been overstated, either by fraudulently raising the figures on the bill or memorandum or by entering a larger amount in the cash book than the voucher represents.

Petty Cash.—Vouchers are often altered and petty cash payments are frequently the subject of manipulation. Junior clerks see how easy it is to hand in a memorandum calling for $10 postage when $5 is all that is necessary, or, in fact, used. Having done this, they gradually extend their field of operation until large sums are abstracted. Postage or mail books are in general use in England, and if more generally adopted here would save many a boy from the penitentiary. It is a grave

responsibility for any employer to permit, or any auditor to approve, a loose or inefficient system for handling petty cash, postage, etc.

A large percentage of young boys who are employed in the business districts of our large cities and who have access to or can draw from petty cash funds, are constantly following the races through the worthless afternoon papers, through poolrooms, or in other ways. Conversations in large offices often indicate the keenest interest in the results of the races not only near New York, but throughout the country. Professional auditors should take a firm stand on all questions, public or private, which affect gambling.

PROCEDURE.—Coming back to petty cash vouchers, in view of the informality of many of them, the auditor's best protection is to have some responsible person scrutinize the payments, rather than the vouchers themselves, and indicate his approval by initialing each page or each month of the petty cash book. The whole question of petty cash vouchers is one which calls for the exercise of good judgment rather than the application of fixed rules. The auditor should take this view of it rather than feel that it is merely a matter of comparing pieces of paper with certain entries on the payment side of a cash book.

There is no great objection to examining every voucher if the concern is not too large, if the auditor has plenty of time, and if he does it properly; but he should relegate the inspection of vouchers to its proper place and, if pressed for time, he should attend first to more important matters.

If a test is considered sufficient, the auditor may verify all of the vouchers for a certain period, or all vouchers exceeding a certain amount for the entire period.

It is important that the records of the petty cashier be verified periodically by an "outside" auditor. In a recent case the manager of a cafeteria maintained by the corporation for its employees, was entrusted with a small fund for the purpose of

paying the current expenses of the cafeteria and of cashing small cheques. He was supposed to deposit in bank daily all receipts in excess of the original fund so that only the amount originally turned over to him would remain in his hands. An officer of the corporation induced the manager to cash his personal cheques from the fund and to hold the cheques undeposited. This continued for a period of ten months, when, upon an investigation being made, it was found that the manager was holding over thirty worthless cheques, the loss aggregating an amount almost three times as much as the manager should have had in his hands at any one time.

Imprest System for Petty Cash.—There are numerous ways of handling petty cash, but unfortunately most of them provide little or no check upon the cashier and afterward furnish no evidence of the faithful discharge of his trust.

The method of charging all petty expenditures in a lump sum to an expense account known as "petty expenses" is a most common one, and one that is highly undesirable. Fraud thereunder often occurs. The older method of paying such expenses out of incoming cash or out of cash received from cash sales, frequently without making any entry whatever, is still worse.

The most satisfactory method is that known as the "imprest" system. The petty cashier is provided with a fund of $100 or $500, or whatever amount is necessary to meet the average expenses of two weeks or a month. This amount, when paid to him, is charged to an account in the general ledger known as "petty cash fund" and stands undisturbed from month to month.

The petty cashier keeps a cash book provided with a column for each of the principal expense items, such as office supplies, factory supplies, postage, stationery, and printing, etc. He continues to pay from his cash fund until the balance gets low, or until the end of the month, when he rules off his book, presents it to the cashier together with his vouchers, and receives in ex-

change a cheque for the exact amount of his expenses. This plus whatever cash balance he has left equals the original petty cash fund. The general cashier in recording the cheque on his records does not charge "petty cash"; instead he charges the various expense accounts direct, posting from the footings of the columns in the petty cash book.

Sometimes a loose summary sheet to which the vouchers are attached is used. On this they are entered in detail. This system does away entirely with the petty cash book. The summary sheet and supporting vouchers become the authority for the issuance of a refunding cheque to the petty cashier.

Journal Vouchers

Vouchers should be submitted for all journal entries and the auditor need not announce in advance how many of them he intends to inspect. If formal vouchers have not been taken, the journal should be read over carefully and all entries for which authority should have been secured should be pointed out as requiring proof.

The journal can be used fraudulently by making in it fictitious or irregular credits to customers or other personal accounts to conceal the misappropriation of cash collected therefrom. To detect this, all credits to customers for allowances, returns, etc., and all accounts charged off as bad should be approved by some authorized official. If no such approval appears, the auditor should ask that the journal entries themselves be initialed. Other credits to personal accounts are made for salesmen's expenses, etc. These should be verified in the same manner as cash vouchers.

Well-managed concerns now supply their salesmen with a fixed fund, and payments for expenses cover the exact expenditures during a given period. This obviates the necessity for paying out round sums after the first item. Subsequent payments can be charged direct to the proper expense account and thus journal entries are obviated.

Transfers from one account to another may be for the purpose of fraudulently increasing one account or decreasing another.

The experienced auditor need not spend very much time on the journal, since a careful glance over the pages will develop any entries which require explanation. The inexperienced auditor should examine the entries carefully and call for documentary evidence to support an item which by any chance might be irregular.

There is a growing tendency on the part of bookkeepers to use a printed form for journal vouchers which serves in most cases as a memorandum from which the actual book entry is made. Consequently, every entry is duplicated. One, however, is called a voucher, although it may not be approved or have attached any evidence of its authenticity. If such a form is used, any papers or documents relating thereto, such as original correspondence from attorneys stating that an account is worthless, etc., should be attached. If founded on the action of a committee or board of directors, reference should be made to the page of the minute book where recorded. If reference is made to a contract or agreement, the file or location of the original document should be stated.

Cancellation of Vouchers

Instances are known where dishonest clerks have used old vouchers to support fictitious duplicate payments, altering the dates thereof. It is important that an auditor mark a voucher in such a way that it cannot possibly be presented or used again.

If clients insist that the auditor must not mark or deface the vouchers, it is difficult to guard against their being presented again, with a change of date, for instance. In view of this possibility the auditor should scrutinize the vouchers very carefully and lay aside for special investigation any which bear signs of alteration. If possible, all vouchers for the period under audit should be retained in the custody of the auditor until all have been examined. If vouchers are numbered consecutively and if

the auditor keeps a memorandum of the serial numbers of those examined, subsequent attempted duplication may thus be disclosed.

The best method of cancellation is to use a rubber stamp bearing the name of the auditor and the initial or number of the clerk in charge of the audit. Some auditors use a conductor's punch.

The book entries should be marked in some distinctive way to indicate that a voucher therefor has been compared with the entry, and, since the voucher may be more or less incomplete, it is wise to use different marks or initials to indicate the kind of voucher submitted. Each auditor should select his own marks. It is advisable to change them from time to time as the client's clerks become familiar with the marks and with the procedure of a routine audit.

MISCELLANEOUS EXPENDITURES

It is reiterated that substance, not form, is the keynote of the verification of expenditures. There will now be discussed some of the major classes of costs and expenses. In passing upon them intelligently rather than mechanically, the auditor has an opportunity to render constructive service.

Repairs and Renewals

In the audit of a large manufacturing establishment this is the most troublesome account which the auditor is called to pass upon.

The underlying purpose of the audit of expenses is to ascertain as far as possible that an equivalent was received for the liability assumed, but the improper application in the books of the expenditure for repairs and maintenance may upset the accuracy of a balance sheet in spite of the fact that value was received for the liability assumed. That is, the expenditure for repairs or for renewals may be charged to plant or some other

asset account instead of to current operating expense, thus inflating the assets on the one hand and the profits on the other. It must be kept in mind constantly that tacit conspiracy usually exists to bring about this very result, and so the auditor is apt to find strong forces arrayed against him as soon as an accurate accounting for maintenance items is begun.

This tendency has been almost completely reversed since the enactment of the income and excess profits laws. This is true to such an extent, indeed, that not only are all repairs and renewals charged to expenses, as they should be, but sometimes items which are clearly additions and which should be capitalized are likewise charged to expenses.

In some plants the necessity for repairs and renewals is so constant that the aggregate cost appears at about the same figure from year to year. In other plants the item is a fluctuating one. In the latter case there is no objection to setting aside a fixed annual sum based on the average over a period of years, and charging against the account the actual expenditures for repairs and renewals.

Care should be taken, in establishing such a policy, to commence it when repairs are under the average. The balance unexpended at the end of the first year should be carried over as a reserve, and at no time should the account show a debit balance or be carried as a deferred asset. If the account shows a debit at any time, the debit should be transferred to income, or the periodical credits to the reserve increased.

The ordinary manager, superintendent, or foreman seems to feel that it is a reflection on him individually or on his department to incur any considerable expense on renewals and repairs. He knows this will increase his cost of operating. He knows, too, that an item charged to an asset account will not be charged against him; so it is no wonder that an analysis of plant accounts sometimes discloses remarkable items which are in no sense of the word betterments, but current maintenance.

In order to make a complete audit of items which should be

charged to repairs, the charges to plant accounts must be analyzed.

Renewals Necessitated by Inadequacy.—When new buildings or equipment are substituted for old, before the old buildings or equipment have been fully depreciated, the book cost of the new must not include the residual value of the assets discarded. In estimating the cost of new projects, losses due to abandonment before effective life has expired usually are taken into consideration. The abandoned plant, however, cannot benefit any subsequent period, therefore the application of the rule that deferred items must carry a benefit prevents the capitalization of the residual values. Also, from another point of view, it is not proper to capitalize past losses; competing concerns making new installations of identical plant will have a lower book cost and lower depreciation charges than the concern which capitalizes abandoned plant. The subject must be dealt with under the reasoning that the combined depreciation and obsolescence allowances of the original cost were too low, otherwise the book value of the abandoned plant would be written off. Failure to provide adequate allowances is a mistake of the past and must be charged off when discovered. It is not fair to future operations to carry over the mistakes of the past.

Allowances and Returns

There are two very good reasons for a careful scrutiny of all credits to customers. The first is that by means of unauthorized credits fraud may be concealed. That is, cash collected from a customer is not accounted for, and subsequently, to avoid discovery, the ledger account is closed by an entry which indicates that goods have been returned or that an allowance has been made.

The second reason is that in the absence of fraud there may be carelessness both in the manner of granting credit for allowances and returns and in the record thereof. For instance, some

automobile dealers deduct freight from credits for returned defective parts; others do not. To a dealer doing a large business this makes a difference of several hundred dollars a year.

In some concerns full credit is not given when goods are returned, simply because an overstock exists. In others, there is little or no check on the returns and full credit is allowed.

The auditor should therefore examine the record which has been kept and ascertain that so far as possible the entries are approved by some responsible official and that no abuse has been made of the return privilege. In order to test the integrity of the entries, it may be desirable to call for the correspondence in connection with a certain number of items.

Goods returned are not purchases, but deductions from sales, but so far as stock records are concerned they should be treated like purchases and tests should be made to see that the entries in the return book are posted to the stock sheets as regularly as those in the purchase records. Otherwise an opportunity may be afforded to a stock clerk to ship goods without accounting for them.

Separate columns should be kept in the allowance and return book, since allowances may or may not be posted to a separate ledger account, whereas returns are always deductible from sales.

The newspapers recently reported a case wherein it appeared that the bookkeeper of a baking company had manipulated his books by crediting customers with excessive returns. The following is the police account, in part:

> He (bookkeeper) left the firm the early part of this month, and when his books were examined, the firm found a shortage of more than $1,500. He admitted entering in the books to the credit of customers a greater number of loaves of bread daily than were actually returned by the firm's drivers.

Purchase Returns.—The return of goods which have been purchased and received is no part of the normal conduct of a business. For this reason, when goods are returned because

they are defective or unsatisfactory, or because they were not ordered, etc., the record of such returns is not always a permanent or satisfactory one.

In most cases dependence is placed on a memorandum made on the original invoice. If made before the invoice is entered on the books, it is practically sure to prevent payment, but sometimes the invoice will have been entered, and if care is not taken, the account will be paid in due course without making any deduction for returns. The best preventive of such omissions is to have a good-sized book labeled plainly, "Returned Purchases," in which is entered a memorandum covering every return. This book should be compared with the purchase books regularly to prevent errors in payments.

Containers

In many lines of business shipments are made in bottles, boxes, barrels, or other forms of containers, which have a residual value. The test of this residual value is the cost of the container, its durability, and the expense of return. When no charge is made for the container and credit is allowed for it when returned, such return is equivalent to a purchase, provided the allowance is not more than the open market price. If the credit is at a higher price than the market, the excess is clearly a deduction from sales. If credit is passed only upon return and if the allowance is not more than cost, no record need be kept of those outstanding, since it makes no difference whether or not they are returned. If a separate charge for containers appears on the invoices and if the information is of value, it is possible to keep track of the aggregate charged for and the aggregate returned without difficulty.

In case of kegs, crates, syphons, etc., for which no charge is made, but which must be returned, the most common, and probably the most satisfactory, method of handling is to note the quantities in the sales book and post the items to the customers ledger, in which a special column should be provided on both

debit and credit sides. If this system has not been in force, a very careful test of the records should be made, as errors usually exist which may be unnecessary as well as expensive.

The method of inspection and of passing credit should have the auditor's attention. If the receiving clerk is careless or inefficient, the number of containers returned may not be verified, and damaged or broken containers may be passed as in good condition. The clerk in charge of the credits should not be allowed to settle the custom of the house with respect to prices to be allowed, freight payments, etc.

If containers are charged to customers at a substantial increase over cost, and if permission is granted for return at the same price, the auditor must provide a reserve to cover outstandings when the books are closed. The auditor should also consider the question of the depreciation of the containers which may be returned as well as that of those on hand.

Where containers are furnished free with an obligation to return, it must be assumed that customers treat the obligation lightly and that a considerable proportion will not be accounted for, in addition to the usual losses and breakages. If feasible, an attempt should be made at some convenient time to secure an actual inventory of containers on hand and within reach which are positively known to be recoverable. A comparison of these figures with the book inventory forms a sound basis for a depreciation or expense rate.

Salaries

In all cases a pay-roll book showing names, positions, and salary rates of all employees should be kept. This does not include workmen and others whose compensation is referred to throughout this book as wages.

The pay-roll book should be arranged with thirteen columns, to cover three months' time. Each column should be initialed by an executive. The cashier should have written authority for each change in rate and for each name added. If one cheque is drawn

for an entire pay-roll, the auditor should verify the footings of, say, every third week.

EMPLOYEES' BONDS.—In considering the question of relations to employees, the auditor should always include in his audit program the query: "Are all employees who handle funds under surety bonds?" If not, they should be. Some employers are lax in this respect, others will not incur the expense, and a fairly large class dislike to mention the matter to employees who have occupied positions of trust for a number of years.

The auditor should present the importance of such protection and point out that the expense is comparatively small, but that the risk is a real one. Of course the auditor has performed his full duty after his recommendation has been considered, and if nothing is done he cannot be blamed for subsequent loss.

It may be, however, that the matter should be given consideration at each audit because conditions and employees change. It might not be difficult to persuade an employer to adopt a rule that every new employee should furnish a bond at the time of employment. This means that in time the entire staff would be bonded. In every case the employer should pay the premium.

Many employers find it desirable to insist that practically their entire force, including salesmen, furnish a surety bond. The reason given is that all of them handle funds at one time or another. It makes it easier to demand bonds from cashiers when the rule is general, and a lower rate can be secured when several persons are covered by one bond. The chief value, however, in requiring bonds from salesmen is that the employer is assured that a most exhaustive inquiry is made into each applicant's character and reputation, extending back over a considerable period of years. This search is far more extensive than an employer can, or cares to, make himself, and since such a bond for, say, $500 does not cost more than $2 or $3, it is well worth a trial. Salesmen are usually intrusted with funds to pay traveling ex-

penses, and similar funds are placed at the disposal of other employees.

Inability to secure a bond should be considered a prima facie reason for non-employment, or dismissal, and a good reason must be furnished to offset the effect of the refusal of the surety company.

It is obvious that a man who cannot furnish a $500 surety company bond is not a desirable clerk.

Does Not Obviate Audit.—Employers sometimes think that placing an employee under bond in some way obviates the necessity for an audit. As a matter of fact, this precaution is all the more advisable because a means is provided for recouping the amount misappropriated, if a defalcation does occur. The surety companies themselves advocate periodical audits. One of the leading bonding companies in America, says:

> Frequent, regular, and thorough audits of cash and books of account by certified public accountants are unquestionably of the greatest benefit to the business man and institution, and should be universally adopted.
>
> We cannot put what we state above too emphatically, and it is deserving of the serious consideration of every business man.

An agent of a surety company wrote as follows in declining an application for a bond:

> The employer's statement says that the applicant's accounts will be examined monthly by an officer of the corporation. The ..... Company advise us that this is not, in their opinion, a complete or thorough check of the applicant's accounts, and they would prefer that the accounts be examined by a certified public accountant.

The surety companies frequently quote their minimum rates where they find that the books are regularly audited by professional auditors in whom they have confidence, and this may represent a considerable saving to the assured.

Save or Quit!—Another point in connection with the relation between employer and employed is that of the financial

condition of the clerk who handles or has access to funds or personal property of value. Defalcations are usually preceded by living beyond one's means, and this fact is frequently known to an employer. There are many legitimate and deserving cases where clerks find themselves in debt. If honest, they will endeavor to get out of debt by reducing their expenses. In any event there is a loss in efficiency wherever a clerk is living beyond his means. It must be on his mind to the detriment of his work. The employer who permits his clerks to overdraw their salaries, or who is indifferent to evidences of extravagance, will surely suffer in the end. It is not out of place for an auditor to remind him that the case of any employee who is not saving money requires attention.

The author has known of cases where one man, holding a responsible position in an office, failed in his own duty and was the cause of his subordinates failing in theirs, because he lived beyond his means and his financial difficulties worried him and made him inefficient. It would have been cheaper to pay him his full salary to stay away from the office.

Salesmen's Commissions

Examine contracts and note provisions as to percentage, territory, and particularly as to whether commissions are payable on delivery of goods or on collection of accounts; also whether commissions are based on gross sales or on net proceeds after deductions for cash discounts, freight, etc.

Traveling Expenses, Entertaining, etc.

Examine contracts of salesmen to see if a limit has been placed on traveling and other expenses. If contracts are not required, inquire of the manager whether any understanding of this nature is in force.

In many concerns the utmost liberality prevails in such allowances, but sentiment along these lines is changing and salesmen are now being held to a stricter accountability than formerly.

The auditor, therefore, should take pains to make inquiries on this point at each audit.

Vouchers for traveling and similar expenses should be approved by someone in authority.

A railroad employee whose duty it was to prepare the vouchers for traveling expenses was recently convicted of padding the expense accounts of officers of the road. By clever duplication of half a dozen signatures, fictitious vouchers covering fictitious expense accounts were prepared. These were then presented, approved, and the amounts collected. When arrested, the employee complained that the railroad paid him only $100 a month, although his predecessor had received $175. His thefts aggregated about $5,000 over a period of two or three years.

The auditor is interested in seeing that railroad mileage is properly accounted for. Mileage may be carried as a separate account on the ledger, if it is large, or it may be regarded as cash and included in the cash figures. When it is given out, the full amount in the book is charged at cost against the traveling advance account of the one who is using it. When it is returned, credit is given just as if cash were returned.

Wages

In the audit of a business having many employees, it is necessary to devote some time to a consideration of the system of time records and wage payments. It is a well-known fact that receipts are worthless as a check on the amounts paid. It may be desirable for a concern to have a receipt from each man to enable it to guard against subsequent disputes, but these receipts are of little real value to an auditor who is attempting to prove to his own satisfaction that the aggregate amounts of the pay-roll payments have reached the hands of those entitled to them.

The auditor must think this out for himself in each audit, but it is suggested that the best check on wage payments is for the client to use as many people as possible during the various stages from the point where the time is recorded to the final handing

out of the envelopes. If the latter, for instance, is done by an employee who has no access to the rolls or to the cash, it makes a good check. If an auditor is on hand when the men are being paid off, he should supervise the operation or even take a more active part, if feasible. Obviously, this procedure is of no value unless it is done without notice to *anyone*.

A few large corporations have tried the experiment of paying exclusively by cheque, but it is believed that the plan has been abandoned by most of them.

Points to Be Considered.—The auditor must direct his attention to two main points, viz., the records, which may be kept accurately or inaccurately, and the clerical force in charge of the records, who may be honest or dishonest. Fortunately for employers, most of the records now in general use are, or should be, mechanical or automatic. The time clock registers the time in and out, and other devices stamp the time actually employed on various jobs. In the office these records in turn are checked and proved by mechanical means.

The audit of wages earned therefore resolves itself into a critical inspection of the system in use. Before making this inspection, the auditor should acquaint himself with the particulars of all the latest devices on the market. He can then evince a familiarity with any system he finds and note any lack of efficiency, and is also in a better position to make suggestions where unsatisfactory methods are found.

Management.—The author feels that the scope of this book is too limited to contain directions as to the best system, except to suggest that, since scientific management has taken hold of the labor question so seriously, and has been more or less successful, the auditor who has to deal with the audit of wages paid, and who is expected to criticize the records relating thereto, owes to himself and his profession the duty of at least reading the best-known books on factory management, and of glancing over the descriptive circulars of some of the really wonderful mechanical appli-

ances designed especially by experts familiar with the practical side of the question. So much for the system.

The personnel and the extent of the clerical force are important from the auditor's point of view. He should be especially vigilant in small establishments where the office force is small and where the same clerk keeps or assists with the original records, makes up or assists with the envelopes, and distributes them or has some connection with their distribution.

ILLUSTRATIONS.—Concrete instances may serve better than theory in pointing out the course the auditor should take to satisfy himself that the pay-rolls are correct.

The auditor should ascertain that the names of discharged men are removed from the pay-roll as of the proper date. In a large factory the foreman handed in to a clerk in the office who had access to the pay-rolls, slips bearing the names of men discharged. The clerk destroyed the slips and recorded full time to the credit of the men discharged. In paying off he secured the envelopes and retained the money. The fraud was not discovered for a long time.

In a factory where time books were kept by the foreman, the assistant cashier transferred the time therein to the pay-roll book. In addition, he entered several fictitious names. The cashier himself made up the envelopes and superintended the paying off. Each week a number of envelopes were left over, as is nearly always the case in a large plant, on account of sickness, etc. Most of them are called for within a short time. In this case the dishonest clerk always had an opportunity to secure the envelopes covering the fictitious names. The auditor discovered the fraud by calling in the time books and comparing them with the pay-roll.

A defalcation of over $30,000 came to light when a proprietor paid off his employees in the absence of the pay-roll supervisor, who was an old and trusted employee. The proprietor's suspicions were aroused when someone who was not known to the

proprietor presented a pay check. It developed that the payroll supervisor had been falsifying the pay records for some time.

Customs Duties

The vouching of duties requires great care, because, until recently, collectors of internal revenue would not accept cheques in payment, but insisted on legal tender. If such payments are few in number, they are usually made through a custom house broker, and his invoices, if properly checked and approved, are sufficient evidence of the propriety of the payments.

In any event, the auditor should inquire into the procedure in force and satisfy himself that the matter is properly handled. Instances have been known where everything was left to clerks who did not have skill enough to find errors when they did exist.

Interest and Collection Charges

Too much confidence is placed in the accuracy of bank clerks; therefore it is usually found that interest charged on loans and credited on deposit balances, discount deducted, and collection fees charged are, in nine cases out of ten, accepted as final without being checked by the client's staff. Auditors whose experience includes much bank work are familiar with the numerous errors made by bank clerks in their own records; and while perhaps a majority of bank officers insist on these errors being located and corrected, yet it is obvious that in calculations involving interest and collection charges or credits, there is not the same likelihood of the correction of errors as exists with those items which enter into the regular double-entry system of the bank.

It follows that many errors are made and remain undetected unless the auditor tests the items. But the auditor should not stop with the verification of the calculations. Banks charge as high an interest rate on loans and discounts as they think the traffic will bear, and if an auditor finds that a concern with first-class credit is being charged 6 per cent, when he knows that other

concerns of equal or inferior standing are paying 4 1/2 or 5 per cent, it is certainly in order to mention the matter when a good opportunity arises. The successful auditor does not lose any good chance to render a service which falls within the scope of a business adviser.

Some banks require borrowers to keep a part of the amount loaned, generally 20 per cent, continuously on deposit until the loan is repaid. This practically means that the rate of interest is increased, say, one-fourth. The auditor should in such cases ascertain whether the client can borrow, or is borrowing, on a more advantageous basis from some other institution. It may be that only one of several banks loaning to the client makes such conditions, in which case the client's attention should be called to the advisability of transferring his loans to some other institution.

Insurance Premiums

Experience shows that the bills of insurance agents are rarely scrutinized unless the item of premiums is a very large one and the bill is in charge of someone especially designated to keep track of the insurance in force and the rates charged for insurance. For this reason a careful audit of the premium bills and a careful analysis of the total insurance carried is a fruitful field of inquiry for the auditor, and particularly advisable in audits where great care is taken with other classes of expenses.

In one case an auditor noticed that a policy had been canceled and another company substituted. He looked for a credit to cover the return premium on the canceled policy, but failed to find it. This started a complete investigation into insurance matters, and it was found that for several years back one or more policies had been canceled each month, due to the undesirability of the risk, but that no credit therefor had been issued by the agent. The total amount recovered amounted to several hundred dollars and the discovery greatly enhanced the auditor's reputation.

Amount of Insurance.—Sufficient attention is not paid to the amount of insurance carried. If overinsured, a useless expense is incurred, and if underinsured, an unjustifiable risk is assumed. The matter is one requiring comparatively little time, perhaps not so much as to verify the footings or postings for a short period, and is of very much more importance.

Coinsurance Clause.—Insurance policies generally contain a coinsurance clause which stipulates that unless the risk is insured for, say, 80 per cent of its value, the assured is a coinsurer for that part represented by the difference between the percentage insured and the required percentage. Auditors should examine the conditions of the policies in each case.

Unexpired Premiums.—As stated elsewhere, the unexpired portion of premiums prepaid at the date of the balance sheet is a deferred asset. In a going business it is proper to set up the full unexpired proportion of the premiums paid in advance, but in a statement of affairs, such as is required in the event of proposed or forced liquidation, it may be necessary to base the calculations upon the "short" rates which are used in the cancellation of policies.

Refunds.—When insurance is placed with mutual insurance companies and a nominal amount is paid as an original premium with the understanding that the proportionate excess of receipts over losses and expenses shall be refunded, such refunds should be deducted from the original premium charged and the net amount considered as an expense. In some cases, due to the fact that a deposit is made with such companies, the refunds are considered as special or financial income, but this is not accurate, since only a small part of the income from which the refund is paid comes from the investment of the deposits mentioned.

The auditor should make a special investigation of the contract or agreement with the mutual insurance companies, because in some cases there are special contingent liability clauses in such contracts or agreements.

Freight and Express

Freight is another class of expense which is passed by many auditors on the assumption that the amounts paid are sure to be accurate, and that it is a waste of time to attempt to go into detail. As a matter of fact, transportation companies, and particularly express companies, are chronic overchargers, and every bill must be checked most carefully.

An auditor need not go into tariff details, but he should inquire closely into the method of check in use, and if he finds that the freight and express bills are not approved as to weights and rates by an intelligent clerk who uses all possible sources of information to secure the lowest quotations, he will probably find an opportunity to make a constructive report on the situation.

Many trades have a central association with a traffic bureau, which furnishes full and free information when requested to do so by its members. The Interstate Commerce Commission will also assist a shipper who feels aggrieved.

In one very large manufacturing company being audited for the first time by the author's firm, it was found that practically no attention was given to the inspection of freight bills, it being assumed that the charges were always in order. A careful test disclosed the fact that many purchases had been made on a basis of freight being prepaid by the shipper. Now it is the custom in such cases for the consignee to pay the freight and to deduct it from the invoices. The company under audit had paid the freight in every case, but had charged it to purchases account instead of to the shipper. The investigation was carried back several years and many thousands of dollars were actually recovered.

Postage

Vouchers should be secured for all purchases of stamps. Postmasters will always sign receipts when requested to do so. Defalcations of small sums are frequently found in connection with postage accounts, so that an auditor should not only scruti-

nize such payments very carefully, but should suggest safeguards which will reduce future possibilities of loss, and, more important still, remove a serious source of temptation to junior clerks.

There should be some relation between the total cost of postage and other expense accounts, such as stationery and printing, advertising circulars, etc.

A post-office regulation is that bills entirely in print, with the exception of the names of the addressee and sender, are third-class matter, and when sent in the mails unsealed, are chargeable with postage at the rate of one cent for each two ounces or fraction thereof. Bills bearing written items, amounts, etc., are first-class matter and chargeable with postage at the rate of two cents an ounce or fraction thereof.[2]

A daily mail book showing the total postage used on outgoing mail requires very little time to compile and is valuable for several reasons. It affords an opportunity to apportion the cost to various accounts and has a most excellent moral effect on those who handle the stamps, because someone in authority from each department should initial the charges to such department at least weekly.

Inquiry should be made to ascertain if postage is paid on outgoing shipments of goods in small quantities. Many concerns add postage to such shipments, and custom permits it unless quotations are made "prepaid." If not so made and a considerable number of shipments are made by mail, it will be in order for the auditor to suggest that the cost of the postage be added to the invoice.

In one instance, where quotations distinctly stated that postage would be added where small lots were sent by mail, the shipping department was extremely careless and few such charges were made. The auditor who discovered the laxity received warm commendation for his vigilance and was requested to make

[2] A pamphlet entitled "Postal Information," is published for free distribution, by the Government Printing Office, Washington, D. C. It contains full information regarding rates, classes of mail, etc.

the most comprehensive investigation into all the other departments of the business.

Legal Expenses and "Graft"

If charges to legal expenses consisted merely of current bills from attorneys, no special mention would be necessary, but the account is such an elastic one that it requires special and careful attention.

In some lines of business secret commissions are paid to the purchasing agents of customers. In spite of the publicity which such practices have received during the last few years, "graft" still exists and no doubt will flourish for years to come. If the recipients are unusually sensitive it is customary to charge the amounts paid to legal expenses or some other account which serves to screen the true purpose of the payments. From an accounting point of view this is, of course, highly objectionable, because it permits sales to show what are almost invariably excessive gross profits without the chance of charging against such sales one of the important direct expenses connected therewith. Legal expense is not usually regarded as an item of selling costs, so that the auditor who suspects the truth can hardly restate the accounts to accord with his suspicion. The vouchers for such payments are signed by some responsible officer of the corporation or a member of the firm, so that the honesty exercised in disposing of the funds can hardly be questioned.

Some years ago an auditor of high standing discovered in the audit of a business that a commission had been paid to the superintendent of the plant owned by another client. He informed the latter, but was not profusely thanked for his information. The other corporation learned of the fact, called it a gross breach of trust, and declined to pay the auditor's bill.

If an auditor feels that the morals of his client are to be judged along with the accounts, he should have the courage of his convictions and so inform the client before the work is started. He will not then be compelled to charge off his bill to bad debts.

DEFERRED CHARGES

It has been pointed out that an accurate income account for any period requires that all transactions during the period must be included unless such transactions are properly applicable to a prior or subsequent period. In most cases the earnings which actually accrue during the period are easily stated. Inventories at the beginning and end of the period and depreciation (which are discussed elsewhere) form the most troublesome factors of uncertainty.

Allocation of Costs and Expenses

Next in importance is to ascertain that all other expenses and costs which are a proper charge against the earnings of one period appear in the same period. Auditors, in order to be conservative, rarely object to the charging off of expenses as incurred, even though the benefit to be derived from the expenditures must necessarily be postponed to a later period. When an advertisement is inserted in a magazine which appears after January 1, it is obvious that no benefit can be derived therefrom prior to January. If the bill for the insertion is charged to expenses in December, no objection is usually made to the practice.

Nevertheless, it is not good accounting practice and if the transactions are numerous or the amounts large the auditor is not justified in indorsing the practice. It obscures statements which purport to exhibit actual results. In the case of the advertisement cited above, the sales or benefit flowing therefrom may be substantial. If so, the benefit when realized is not properly charged with its actual cost so that the profits of both the old and new periods are incorrect as shown on the books. By setting up the cost when paid in December as a deferred expense, carrying it on the balance sheet temporarily as an asset, and charging it off as an expense in January, the equilibrium of the accounts is maintained and statements made from the books are correct.

In this connection it should be borne in mind that the term "good accounting practice" is not wholly a technical expression; it is an inclusive term and comprehends moral as well as business practices. A corporation may start with a cash-paid-in capital of $1,000,000. Pursuant to a well-defined plan it may expend most of the capital in development expenses during the first year or two. At the end of the third year its balance sheet may show a large deficit or deferred charges, depending on the method of bookkeeping. If a deficit is shown, stockholders will be discouraged and sell out their stock at a loss. The favored few who realize that the balance sheet does not correctly state the condition of the corporation will buy this stock at much less than it is actually worth. During the fourth year large profits are shown to have been earned, because there are no deferred expenses to be charged off. The stock goes up and those who were fortunate enough to know that the books misrepresented actual conditions will reap the benefit. The balance sheet showing the large deficit and the later balance showing the increased profit were both false.

The foregoing comments must be restricted to expenditures which clearly aid or which are intended to aid subsequent periods. From the standpoint of good accounting practice, there is no option as to how the items shall be charged. The function of accounting is to portray in a scientific manner the financial condition of a business. If expenses are incurred in a single year or during a few years, and if those expenses are incurred wholly for the purpose of increasing profits in future years, such expenses are clearly in the nature of an investment. If they are charged off as expenses in the year they are incurred, the current book profits are smaller and the subsequent book profits are greater than is actually the case, and the real purpose of keeping the books is defeated; the books do not present the real condition of the business. Charging such expenditures to periods which cannot realize the benefits is bad accounting practice. From the point of view of expediency, or to be ultra-conservative, auditors

frequently approve charging off immediately to operation items of deferred charges which are properly classed as capital expenditures. At least this was frequently done when tax rates were low. Probably the only regret flowing from ultra-conservative charging off or writing down plant values to $1 has been the trouble incident to restoring all capital expenditures to the books for invested capital purposes.

The practice of charging off such expenses immediately has been changed to no small extent by the passage of laws levying high income tax rates. A practice which might be passed over as conservative under a 1 per cent tax law, might easily result in disaster under an 80 per cent law. Failure to charge against the years 1918 and 1919 the expenses which belong to those years might result in a tax of over 100 per cent of the actual net income.

This fact is illustrated by a case coming to the author's attention, the facts of which were as follows: A corporation was organized in 1914 for the purpose of engaging in a business the very nature of which required that an extensive campaign be carried on during the first few years for advertising purposes and to secure contracts running for terms of several years. This campaign was not wholly for the purpose of building up goodwill. The business had been carried on for a number of years by a department of a nationally known corporation. The campaign was more in the nature of development work—expanding the business to take in other industries than the one which had originally utilized it.

During the first three years of the corporation's existence, almost $750,000 was expended in this development work. During these years the profits averaged $100,000, the development work being charged to expense. In 1917, 1918, and 1919 there were no development expenses and the average profits as shown by the books increased to over $250,000. In 1919 alone, the book profits were over $400,000. Obviously these large profits were the result of the contracts which had been entered into at great expense during the first three years, and that expense should

have been charged off in the years which reaped the benefit of those contracts. As a result of not doing so, the corporation was put to considerable embarrassment. The small book profits of the first few years—made smaller than they actually were by charging development expenses to those years—were taxed at the rates of 1 and 2 per cent. The profits of the years 1917, 1918, and 1919—appearing on the books as greater than they actually were because those years did not bear any of the expenses which made those profits possible—were taxed at the higher rates obtaining in the excess profits schedules of the Revenue Acts of 1917 and 1918.

The author looks forward to the time when invested capital in its technical sense will be no longer a factor in accounting and when good accounting practice can again be disregarded without penalty. The foregoing statement applies only to such situations as afford good reasons for conservatism and where the special treatment of the items is clearly set forth so that no one is deceived.

All payments for insurance, bank discount, rent, taxes, dues, subscriptions, and similar items should be scrutinized in order to determine the proportion, if any, which applies to a subsequent period and thus constitutes an asset, when the books are closed, in the form of a deferred charge to the future operations of the business. To save time, the auditor may request one of the client's clerks or the insurance broker to calculate the prepaid items, in all cases testing the accuracy of their work.

Extraordinary expenditures, such as repairs and renewals incident to accidents or storms, are sometimes capitalized at the time they are incurred, with the expressed intention of spreading the loss over several years. The same situation arises where accident insurance is not carried. A certain percentage of the gross receipts is set aside in a reserve account to pay losses, the payments being in excess of the reserve. Quite frequently the debit balances so created are carried forward as an asset until subsequent accruals wipe out the deficit.

This practice is not sound, because in the last analysis it simply results in setting up on the balance sheet accounts which are in no sense of the word assets. If the word "assets" means anything at all, there is no justification for including in it items of maintenance, expended because of necessity, which do not tend to improve the physical or financial position of the enterprise.

Perhaps these charges, if incorporated among the costs and expenses of a current period, tend to hide the normal operations; but if the unusual item is clearly set forth, this procedure is preferable to making direct charges to surplus. It may be hard to resist the temptation to capitalize these items, but the practice is to be condemned. It may not sound well or look well, but it has the advantage of portraying the actual state of affairs. This is not the case when an attempt is made to call an expense account an asset. Directors who realize their personal responsibility for dividends paid out of capital will not vote for a distribution of earnings which does not take into account expenses actually incurred.

Bond Discount.—If discount on bonds is carried as a deferred charge to operations, the auditor should verify the amortization calculations. If this provision is not in order, an adjustment should be made before the balance sheet is certified to.

One of the most interesting parts of the opinion of the Superior Court of Pennsylvania in revising the order of the Pennsylvania Public Service Commission in the Ben Avon Borough—Ohio Valley Water Co. case,[3] dealt with the treatment of bond discount as a capital charge. The court found that bond discount to the extent of 7 1/2 per cent of the reproduction cost of the property was a fair amount to be included in capital value. The court said:

> Concerning the item of brokerage, the courts and commissions of other states have held that discounts on securities should be allowed; as utilities, like other companies, are not able to make their financial arrange-

[3] 68 Pa. Superior Ct. 561, 591.

ments without allowing such discount. The difference between the amounts derived from the sale of its bonds and the amount which the company must eventually pay on the bonds has been regarded as a part of capital charge for construction. While corporations should not be permitted to capitalize their lack of credit, still, where bonds are sold at a reasonable discount and bear a fair rate of interest, such discount should be allowed. What is a fair discount depends upon the condition of the money market and the ability of the organizers to attract capital to the project. It is a well-known fact that the great majority of companies are started without all the available cash necessary to complete the undertaking. This country would not have reached its great stage of industrial development if it had been the rule that all capital must be procured in advance by fully-paid stock subscriptions. If a legal rate of return was all that was offered, the investor could very well answer that without risk and, with a safe margin of value, money could be loaned on lands and buildings at this rate of return. When solicited to invest in a new project, with the uncertainty of success before him, the investor demands a return commensurate with the risk involved, and that must be something more than a legal rate investment. If the venture is a failure, the investor is compelled to take his loss without any hope of recoupment; but it is equally unfair to require him to suffer all the loss if the enterprise fails, and to deprive him of the chance of additional gain if the venture is a successful one.

Doubtful Deferred Charges

In addition to the expenditures heretofore discussed which clearly benefit subsequent periods, there are expenditures the benefits from which are doubtful. When there is doubt as to such benefits, good accounting practice cannot prescribe specific treatment. The conservative method is to immediately charge off all doubtful items, but if there is a question as to what periods will receive the benefits and if the amount involved is substantial, good accounting practice leaves to the accountant the option of charging off such expenditures over a certain period of years or of charging them off currently.

More than one enterprise has been wrecked by the failure to look preliminary or establishment expenses squarely in the face. The temptation to state the current operations in such a way as to

show a profit was too strong; so those concerns have gone along from year to year, the burden increasing instead of diminishing, until the inevitable day of reckoning, when it was realized that liabilities cannot be liquidated with capitalized expenses.

The recent report of an automobile business stated that the auditors had insisted on charging off all of the expenses of establishing branches which previously had been carried as an asset. The monthly reports had shown big profits, which had been largely paid out in dividends, with the result that the working capital had been reduced to an amount below the safety line. If auditors with the courage of their convictions had been consulted earlier, the company's credit would probably not have been impaired to so great an extent.

Experimental and Development Expenditures.—The results of experimental and development work cannot be foreseen and, since subsequent benefits are doubtful, the treatment is to some extent optional; but under certain conditions good accounting practice requires that such expenditures be capitalized. There are three methods of handling such items: (1) capitalize them; (2) amortize them over a limited period or over a definite output of product; (3) write them off immediately.

1. When expenditures are extraordinary and are made with a specific purpose, such as a reduction in costs or an increase in production, it is improper to charge the cost of the work to a period which cannot benefit from it. Improvements in patents and in processes which have a continuing value should be capitalized and written off or else carried permanently depending on the circumstances.

2. When the value or benefit of the expenditures can be allocated to a definite period or to a definite output, the cost should be spread over such period or such output. For instance, the cost of an improved process for refining ore or mining coal should be spread over the life of the mines benefiting from the process.

3. When experimental or development work is carried on

with more or less continuity and as a settled policy, it is proper to write off such expenditures immediately.

Organization Expenses

Formerly if the expenses incurred in the organization of the company (such as incorporation fees, legal, engineering, and other expenses, engraving bonds and stock certificates, transfer fees and stamps, etc.) were more than could fairly be charged into current expenses, it was considered permissible to spread such charges over a term of years, preferably three, but not more than five. Sentiment is changing as to the wisdom of spreading these expenses over more than three years. The best practice is to charge off immediately everything which has no tangible or residual value. The benefit from such items cannot be compared to advertising and exploitation expenses. It is a fallacy to assume that stock certificates, incorporation expenses, etc., have any of the attributes of an asset; and so the sooner the cost appears in the expense account, the better.

The old theory of deferring part of the charge to income was sound enough, but the rule has been abused; and so we now find apportionments over five years or longer. In some cases all organization expenses, using the term in its broadest sense, are permanently capitalized. The author advocates charging off all such expenses as they are incurred.

But it should be ascertained whether or not the promoters (if the enterprise was "promoted") agreed to pay any part of these expenses. This is a matter of increasing importance, because a number of corporations are being organized where this obligation is assumed by the organizers.

Expenses to Secure Future Business.—Other items, such as advertising and exploitation expenditures which are intended to produce future business, may not appear to be a proper charge against income which could hardly have received the benefit of such payments. An auditor may pass the carrying forward of

any legitimate expenditure which has been incurred solely for the benefit of future business, provided that in his judgment the setting up of the deferred charge, and its consequent inclusion as an asset, is justified by its probable value to the future business.

But it is not enough that the expenditure has been made. For instance, a large number of circular letters calling attention to a special sale in January may be sent out in December. If the auditor commences work in February and finds that the campaign was a total failure, it would be rather misleading for him to certify to the accuracy of a balance sheet as of December 31 showing the entire expenditure as an asset.

An auditor should be willing to back up his opinion with his certificate. If in his opinion expenditures of this nature are actually deferred assets, he should so certify. It should, however, be noted that the most successful concerns carry on selling campaigns all the time, and there must be some limit to the postponement of the actual charges to current operating.

If the business is not successful there will be no future profits to which the deferred items can be charged. Therefore, the auditor should use every argument he can muster to induce his client to absorb these expenses as soon as possible, and never to carry them forward unless it is improper to include them among the current expenses.

CHAPTER XXVI

THE DETAILED AUDIT (Concluded)

In addition to the verification of all items of possible revenue and expenditure, the program of a detailed audit is not complete without a more exhaustive investigation into certain phases of the accounts, and the consideration of trial balances as such and all accounts therein to determine which represent proper real and nominal accounts and which, if any, are merely ledger accounts which require analysis and restatement in order to make possible any intelligent use thereof.

THE TRIAL BALANCE

One of the most important matters in any audit is the verification of the trial balance. By this is not meant the routine checking of the ledger footings and extraction of the balance merely to test its arithmetical accuracy, but that careful examination or study of it which throws light on the entire and detailed working of the whole system. Every ledger caption should mean something. After some experience, an auditor, by simply looking at the various accounts scheduled on the trial balance, is able to discuss the whole system, and without further data to suggest improvements therein. Of course, no sane practitioner commits himself after such a cursory glance, but he gains sufficient insight into the affairs of his client to suggest the next and succeeding steps in the audit. He must not spend too much time on trifling errors in a trial balance, but should take enough time to satisfy himself that the trial balance honestly represents the face of the ledgers and that it may be relied on as a basis for a report or balance sheet.

The auditor should secure a copy of the last trial balance at

the earliest possible moment. Usually, if he asks for it at the commencement of an audit, it will be copied for him by an office clerk. He need not ask for the customers' balances in detail, since he will wish to compile these himself, as explained hereafter. As to the other accounts, however, the trial balance is of great importance. Subsequent analyses of accounts will lead up to the trial balance, and any alteration of figures in the ledger will probably be disclosed thereby.

If the trial balance is not correct, it is no part of an auditor's duties to locate the error or errors therein. He should insist that the client's staff secure an exact balance; if this is impracticable, the matter should be referred to the client and an understanding reached as to further procedure.

The best plan is for the audit to proceed as if no difference exists. The various tests suggested should be made, but no other steps taken, unless numerous errors are discovered, in which case permission should be secured from the client to verify all the work and secure a correct balance. If the errors are few in number and the accounts are reasonably correct, the auditor should not attempt to hunt for clerical errors. He can better postpone the audit until they are located, even if an additional clerk is required. Anyone who spends his time in such work is not, and is not developing into, a professional auditor. Such elementary bookkeeping work should be left to clerks.

Outstanding Accounts

A schedule of accounts receivable should be compiled to supplement the trial balance. It is a waste of time to prepare or verify a trial balance and subsequently duplicate the larger part of such work in the verification of customers' balances.

The balance due from each customer should represent specific invoices unpaid, or else it should be clear that the debtor is making partial payments. If the credits indicate that the latter is not the case, even though the balance due cannot be identified with the most recent invoices, then it is apparent that a discrep-

ancy exists which requires explanation. In all such cases the auditor should require one of the office staff to show the composition of the balance. It may develop that, in order to furnish this information, the entire account must be analyzed, but this, of course, is the best possible reason for insistence on the part of the auditor.

Income from sales cannot be completely verified until all debits to customers are ascertained to be collectible; charges known to be uncollectible, but remaining open in the accounts of solvent debtors, may be difficult to locate, but are none the less important.

If the balances used in the final trial balances are not brought down, they should at least be noted on the ledger pages. Preferably this should be done by the office staff, but, if necessary, the auditor should do it himself. When credit balances appear on customers' accounts, the total of such balances should be included among the liabilities and the total debit balances should be set forth as accounts receivable instead of including the net balances only as assets.

Examine accounts written off during previous years and see whether any effort is being made to collect from those which are not absolutely worthless.

Bad or Doubtful Accounts

The schedule just referred to, in addition to showing that the balances due from solvent debtors are composed of collectible items, should indicate each account that is overdue, so that inquiry can be made about such items to determine the amount required to be reserved. In addition, an amount should be reserved for the current items based on past experience. The deduction of the sum of these two reserves should bring the aggregate due from trade debtors to an estimate of the amount which will be realized in cash.

It is not always desirable to close a doubtful account to income, and it is never desirable to carry an account long overdue among the current accounts. The best practice, therefore, is

to transfer the account (or the sheet, if the ledger is in loose-leaf form) to a doubtful accounts ledger, at the same time creating a reserve therefor. The balances in this supplemental ledger will not be lost sight of, since they form part of the trial balance.

As soon as an account is known to be irretrievably bad, it should be written off entirely. In the meantime a record of the progress of collection, such as commencement of suit, etc., should be noted on the account.

Provision for bad accounts in the form of a reserve should be made each month, based on a percentage of the total sales. This fixes in the minds of all concerned the fact that losses may be expected, and stimulates the credit and collection departments to keep down the losses and "make a profit on the reserve." If this course is not followed, the auditor must make the reserve large enough to cover the losses which his experience teaches will be incurred.

In this respect managers and others sometimes mislead the auditor because they do not admit the full amount of the bad accounts. After some years of experience an auditor finds that his opinion on this point is better than anyone else's and he should use his own judgment in stating the probable losses. This applies especially where the business is comparatively old and actual losses for a series of years can be ascertained.

ASSET AND LIABILITY ITEMS

From the point of view of clients' relations to their employees, the audit of income and expenses is more important than the audit of the balance sheet; but the accuracy or inaccuracy of the balance sheet affects proprietors, whether partners or stockholders, as well as the public through its representatives, the bankers, creditors and prospective investors. It is also of importance as a basis of transfer from one partner to another.

The detailed audit naturally includes a verification of the assets and liabilities, and, in order to avoid repetition, the chap-

ters on balance sheet audits[1] should be referred to as indicating a part of the program of a detailed audit. Some balance sheet items are more fully covered in a detailed audit than in a balance sheet audit. They will now be discussed.

Notes Receivable

The record of notes received should be examined, and if comparatively few notes have been received, the disposition of each note should be followed from the account to which credited until collected or returned unpaid. If a large number of notes have been received, the auditor should test the accuracy of the record by selecting a few months at random out of the year and verifying in detail the transactions appearing in those months.

Notes Receivable Protested

See that protested notes are charged back to the account of debtor, and that a subsequent attempt is made to collect. The protested note should be submitted as a voucher or otherwise accounted for in all cases where the item is still open. It is possible for a dishonest cashier to charge back as unpaid, items actually collected, and subsequently write off the account to bad debts; but in such a case, as no voucher can be produced, the fraud is disclosed. It is a small matter, but the auditor should ascertain whether or not all protest fees and accrued interest, as well as the face of the notes, are charged to debtors. In many cases collection can be made subsequently, so that the omission to charge all proper items direct to debtors' accounts means the loss of such items.

Inventories

In a detailed audit this item in the balance sheet should be examined first if there are collateral indications that the business has been profitable, even though the books show a loss. Inventories are frequently taken hurriedly, materials in transit are often

[1] Page 71 *et seq.*

omitted, or included when the bills therefor have not been entered. An inventory at the beginning of a period may be overvalued, and at the end undervalued, and numerous other causes may be cited to suggest errors which, if not detected, result in misleading income statements. In a case of this nature an auditor finds the inventories a most fruitful source of error.

Here also an auditor must use good judgment in passing values, for each increase or decrease in an inventory affects the income account correspondingly. It is about as bad to pass values which are understated as to pass values which are overstated, where the result may be used for ulterior purposes. The most flagrant cases, however, are overvaluations. With these an auditor must deal without fear or favor.

Premiums and Discounts on Bonds to Be Amortized

When bonds are sold at a premium, the amount received in excess of the par value represents the equivalent of interest collected in advance, and must be held in reserve and distributed over the years to which it applies as a reduction in bond interest account. For instance, a corporation may sell its 5 per cent ten-year bonds at 105, indicating that its credit is rated on a basis of about 4 1/2 per cent; that is, if a 4 1/2 per cent bond had been issued, the corporation should have realized about par. Therefore, the bond interest, when paid, is subject to a deduction of one-half of 1 per cent annually. The excess received at the time of sale should not be applied to income or to surplus, but, as stated above, must be carried as a deferred credit and reduced annually.

Likewise, when bonds are sold at a discount it is because the rate of interest the bonds bear is less than the effective rate at which the corporation's credit is rated. For instance, if 5 per cent ten-year bonds are sold at 90, this means that the corporation's borrowing strength is rated at about 6 per cent, and, in order to reflect the actual rate each year as interest is paid, it is necessary to carry the discount as a deferred charge among the assets and write off to interest account 1 per cent annually. This,

added to the amount paid in cash, adjusts the interest account to the proper cost.

A clear exposition of the subject of amortization, with corresponding tables for annuities, present worth, sinking funds, etc., can be found in *Accountancy of Investment* by Sprague-Perrine.

Premiums on Capital Stock

With respect to premiums received on capital stock, the principle is different. There is no liability on account thereof, and no distribution to the income of future years.

The amount received is clearly a capital receipt and is not available as a fund out of which to pay dividends; that is, from an accounting point of view. There may be no legal obstacle in the way of crediting the premiums to surplus, and paying out the entire surplus as dividends, but in effect a board of directors might as well attempt to pay out the remaining portion of the amount received for stock. Let us suppose that stock is issued at $110 per share, $100 being credited to capital stock, and $10 to surplus. If the latter amount is distributable, why not $10 more, leaving $90 to be credited to capital? The answer would probably be made that the law does not permit capital stock to be issued at a discount, but since property of all kinds may be turned in as payment for stock, the theory of stock being issued for actual value is a dead letter.

Premiums received on capital stock should be credited to an account so entitled or to capital surplus, and should not be absorbed in the regular surplus account.

Premium on Redeemable Preferred Stock

When preferred stock is issued with a provision that it is redeemable after five years at 110, or any other figure, the premium paid at redemption may be considered an extra dividend.

It must be remembered that the provision to redeem the stock at a premium cannot be made mandatory. The premium is a charge against profits in any event, and cannot be paid unless

there are sufficient profits earned out of which to pay it. A promise to redeem at a premium is not binding because of this unavoidable condition.

Branch Accounts

The extent of the examination of branch accounts should depend on the system of accounts employed. Where local collections are made, the accounts receivable require the same attention as described on page 579; where shipments are reported to the head office, and collections are not made locally, there is still the necessity of testing the delivery records to ascertain that all have been reported, and that cash sales, if any, have been duly accounted for. At the same time the stock accounts require attention, both from the point of view of theft or loss and overvaluation.

Nearly all branch managers have an interest in the profits derived from their own territory, and in consequence nearly all branch managers place the highest possible valuation on their stock-in-trade. It may seem difficult to manipulate the stock record valuations where prices are fixed at the head office, but opportunities usually arise in connection with shopworn or obsolete stock, etc., and in some cases quantities are deliberately overstated.

Local expenses and purchases are usually reported to the head office in detail, so that outstanding liabilities should be comparatively easy to verify. If paid locally, the usual precautions must be taken to ascertain that no omissions are made.[2]

In some cases where time does not permit an auditor to visit all branches personally, local auditors can be employed to advantage. Uniform instructions should be sent out and adhered to strictly, so that the auditor in charge can feel safe in using the figures so verified.

Capital Expenditure

Throughout the audit of expenditure the distinction between capital and income must be borne in mind. It is sometimes

[2] See page 538 *et seq.*

believed that so long as expenditure for capital outlay, as well as for current maintenance, is charged to income and not capitalized, no fault can be found with such a conservative course, but that the reverse of this practice cannot be justified under any circumstances. Theoretically this position is wrong, the proper rule being to ascertain the correct application of each payment and to charge the account to which the item belongs. Practically, much can be said in support of what is known as the conservative method.

Maintenance versus Construction.—The great difficulty in ascertaining the exact effect of alterations, betterments, and new construction, and the prevailing tendency of managers and others to emphasize the propriety of capitalizing the payments, inevitably educate accountants and business men who do not want to deceive themselves, to the determination to charge to maintenance every item about which there is the slightest doubt In other words, a practice which is objectionable in theory becomes a virtue in practice, and a substantial reason therefor is that the business always gains thereby and never loses.

The audit of capital expenditure is rarely satisfactory when made by items, since one item may be chargeable to capital, while another item of exactly the same nature may be chargeable to income, the distinction depending entirely on the purpose for which used.

All well-regulated concerns have a storeroom system, which means that most debits to plant accounts originate in storeroom charges. It is simply impossible to determine long afterward, by a mere inspection of the voucher, whether it should be charged to one account or another.

Method of Verification.—The most satisfactory verification is to secure a dependable memorandum of the additions and improvements which have been undertaken or completed in order to increase the earning power or efficiency of the plant. That is, if a new building has been erected or a new power plant

installed, assemble all of the items applicable thereto[3] and compare the expenditure as a whole with the estimated value of the improvement, or the official authorization. Ascertain what it replaced, and what additional capacity or economies are effected.

Odds and ends should not be charged to capital, so that the increase in plant accounts for a given period should be reducible to definite grouping as indicated above. If it is found that the total capacity of the plant is not materially increased by the outlay, it may be inferred that the changes were necessary to renew or replace worn-out or obsolete buildings or equipment.

Profits Earned Prior to Purchase of Capital Assets.—Where a corporation purchases during the fiscal year the net assets of another corporation, that is, takes over the assets and assumes the liabilities with a further provision that the purchasing corporation will receive the profits earned since the close of the previous period, this profit after it is determined is not income but capital. It is impossible to realize a profit until after the acquisition of property. It may immediately be *resold* at a profit, but that constitutes a new transaction. The cost of property is its net cost. Profit accrued up to date of acquisition, or surplus from reappraisals, are merely adjustments which affect the net purchase price; current or earned surplus is not affected.

Cash Discounts on Capital Payments

It is held by some that the cash discounts deducted from payments on account of capital outlay should be credited to interest or discount account and be treated as an earning. This, however, is a fallacy, as will be shown by a concrete example. Suppose a fund of $10,000 is set aside to buy machinery; the invoices may aggregate exactly $10,000 and are subject to a discount of 2 per cent if paid within ten days. Advantage is taken of the discount

[3] Among the elements which enter into cost new and cost of reproduction are the following: organization, legal and engineering expenses, interest, discount, taxes and insurance during construction, city inspection, brokerage, and contractor's profit or compensation.

and $9,800 is paid out. It cannot be contended that the cost is $10,000 and that an earning of $200 is realized, because such is not the fact. The machinery cost $9,800 in cash, and the cash balance which remained is simply an unexpended fund. It has not been used and is now available for other purposes. This is parallel with the treatment of cash discounts on merchandise purchases, the net result being the same because the purchases account is ultimately reduced by the amount of the discount through the income account.

Real Estate

In any business other than that of realty, there are few items of cash payments in connection with the purchase of land or improved real estate. More frequently it is found that bonds or stocks are issued in payment therefor. Usually these items can be vouched from the minutes of boards of directors, the contracts themselves, and the acknowledgments of the payees.

An instance is known of a promoter who was made the president of a holding company who paid himself, as representing one of the subsidiaries, a larger number of bonds than he was entitled to. The records of the holding company were altered to fit the transaction and the auditors were deceived. If the books of the subsidiary company had been examined, the fraud would have been discovered.

Buildings

Where a considerable amount is being expended on new or old buildings, the payments should be carefully vouched. Individual payments, however, will probably be supported by genuine-looking vouchers and will not reveal any irregularity which may be going on, either on the part of the client's staff or on the part of the contractor. Therefore, the operations as a whole should be checked with the authorizations of the board of directors, or executives in charge of the work, and with the bids or estimates submitted before work was commenced.

WHAT TO CAPITALIZE.—It is permissible to charge all expenses and outlays, such as permits, architects' and engineers' fees clerical salaries when clearly applicable to new work, and similar items, to the work itself. It may seem more conservative to charge part of this expenditure to revenue, but in all cases it is preferable to assemble all costs into one account; then if it appears desirable to write off a part of the cost, it can be done at any time. The whole cost, however, having once appeared in one account, is subsequently available for any desired information.

PROFIT EXCLUDED.—Where new buildings are erected, in whole or in part, by the concern itself, it is important to ascertain that no profit is included. Auditors frequently find this state of affairs and are met with the argument that if the contract had been awarded to an outside concern, a contractor's profit would have been added. A concern not in the contracting business cannot always, however, erect a building, or in fact perform any work outside of its usual operations, at the same cost as can one whose sole efforts are devoted to this class of work and who may be depended upon to have discovered economies in purchasing, planning, and executing not possible except after long experience. If an actual saving has been effected, it is not a realized profit and should not be treated as such. The asset account should represent cost, but nothing more. The following is from the *Federal Reserve Bulletin*, April, 1917:

> While it may be considered permissible to make a charge for factory overhead cost to additions to property such as e.g. time of superintendent and his clerical force employed on construction work, etc., it cannot be deemed conservative business practice, inasmuch as the probabilities are that the overhead charges of a plant will not be decreased to any extent even though additions are not under way, and, therefore, the absorption of part of these charges when additions are in progress, has the effect of reducing the operating costs, as compared with months in which no construction work is under way.

INTEREST.—Cost, however, may include (during the construction period) interest paid on borrowed money used for construc-

tion purposes. Otherwise a concern may find that a profit and loss deficit existed with respect to a new plant, before its completion. After completion a plant is expected to earn a sufficient profit to cover interest, but it is unreasonable to apply such a rule before its earning power becomes possible.

The accounting practice of charging interest to construction produces unequal results so far as comparative records are concerned. One concern erects a plant with borrowed money; another concern uses its own capital. Other things being equal, the book records show that one plant costs more than the other. Subsequent depreciation charges of one are more than the other; nevertheless the books merely record the facts. Upon the beginning of operations neither concern showed a loss or a profit; subsequently the operating costs of one are less than the other—as they should be. The benefit is equivalent to a return on the concern's original investment of its own capital.

When questions of rate-making or public supervision are in issue, an adjustment of book costs is required. Both concerns should be treated the same. To the book cost of one should be added an amount equal to a fair rate of interest. After the beginning of operations both concerns will then be on the same footing. The allowance for rate-making does not commence until construction is complete or operations begin. If the adjustment is shown in the books (which is not necessary) the corresponding credit is to capital surplus; the income account and rate-making are not affected.

Instalments Due.—The auditor should ascertain whether instalments are due on contracts in progress. The liabilities for such instalments should appear on the balance sheet because they should be considered in connection with the amount of current assets.

Improvements and Extensions

These terms are descriptive in themselves, but they are hard to define in practice; that is, hard for an auditor to define. An

executive or the man in charge of the job has no such difficulty. Before the era of high tax rates every new job was an improvement, an addition, or an extension, and the entire cost was capitalized. Since the incidence of high tax rates the tendency to capitalize all so-called improvements has greatly lessened. The fact is that practically no part of a plant is renewed or replaced in exactly its former state. Almost invariably it is enlarged or otherwise changed for the better, so that there is some basis for the difficulty of determining what to do. If there is no increased earning capacity the question is simplified, but even here we cannot lay down the hard-and-fast rule that no part of the new cost must be capitalized.

ILLUSTRATION.—Suppose a railroad company demolishes an old wooden station and erects in its place a larger and more ornate structure of brick and stone, at a cost which is $100,000 in excess of the book value of the old building. It may be assumed that the earning capacity is not materially increased; probably the maintenance cost of the new structure is greater than that of the old. The argument will be used that the traveling public demands beauty as well as utility; and there is an actual, if almost imperceptible, increased earning potentiality in the more handsome structure.

The same point arises in connection with manufacturing concerns. Large and expensive office buildings, recreation facilities, and similar expenditures are made without any apparent increase in earning capacity.

PROCEDURE TO FOLLOW.—The auditor must decide each case on its merits. Wherever possible such expenditures should be charged to expenses. If the expenditures are large and of infrequent occurrence, it may be permissible to spread them over a period of two to five years. This may seem to be rather drastic practice, but between the alternative of loading the plant account to the danger point—as so often happens—and keeping it down

to a safe and sane basis, there should be little argument as to which is better accounting.

Managerial Salaries.—Another somewhat uncertain point in plants where improvements or extensions are being made at intervals, is the selection of the proper account to which the salary of a manager or a superintendent should be charged. It may be that the entire time of these officials is devoted to the new construction while it is going on, and so there may be some justification for capitalizing part of such cost.

Here again is a case of doubt which should be decided in favor of conservative practice. As heretofore stated, work of this nature performed partly or entirely by a concern not in the building trade, usually costs more than if contracted for outside. There may be good reasons for not having the work done outside, but there is no good reason for running up the book cost beyond its replacement value.

If left to the auditor to decide, he should not load the plant account with any general expense items such as managers' or superintendents' salaries.

Machinery, etc.

The important point to keep in mind in connection with purchases of machinery, tools, fixtures, etc., is whether they represent actual additions to plant and equipment, or whether they are renewals. This point is covered in Chapter XXVIII, "Depreciation." The cost of installation, including freight, labor, and other items, is as much a part of the cost as the price of the machinery itself.

Where machines, etc., are built by the concern itself, the remarks found above under "Buildings" will also apply.

Instalment Plan.—Where machines have been purchased upon the partial payment or instalment plan, it is customary to charge the entire purchase price to the machinery account and credit the vendor. As the monthly or other periodical payments

are made the vendor's account is charged and finally closed. Interest is usually included in the gross purchase price, but of course does not form part of the price if cash is paid. The proper entry is to debit machinery with the cash price, and debit the interest account with the balance.

On the balance sheet, if prepared before the last payment is made, the value of the machinery less depreciation should be shown among the assets, with the facts as to the lien clearly shown in the face of the balance sheet. The unpaid instalments are, to some extent at least, current liabilities and must be so included.

If the payments extend over several years, the interest applicable to subsequent years may be set up as a deferred charge. If at the time the balance sheet is prepared, any instalments are overdue, or if they have not been paid promptly, it may be that the equity will be lost through the retaking of the machines by the manufacturer. This possibility must be considered in valuing the item.

Royalty Payments.—Machines are sometimes purchased under an agreement that a royalty will be paid on the output. The royalty payments should be charged to operating expenses. They have no connection with the purchase price so far as the books are concerned. The value of the machine is set up as an asset and depreciated on the basis of the effective life of the machine.

Notes Payable

All notes paid during the period under audit should be submitted as vouchers. If notes are issued from a stub book, or if a special form is used, all should be accounted for. Spoiled notes should be pasted on their respective stubs as is done with cheques.

If careful consideration is given to the notes issued during the period, it will assist the auditor to determine whether all notes outstanding at the date of the balance sheet appear thereon.

UNRECORDED NOTES PAYABLE.—In a detailed audit the auditor finds better opportunities for securing information relative to notes payable outstanding, but omitted from the books, than in the case of a balance sheet audit. In the former case scrutiny of cash receipts, interest, discount, bonuses paid, and credits to the personal accounts of partners and officers of corporations, may disclose clues as to unentered or misapplied liabilities. Creditors should be asked to confirm the amount of the liability on notes as well as on accounts. Purchases of fixed assets are sometimes made by giving notes which may still be outstanding. The asset accounts may be charged for only the amount paid or for the full face value of the notes.

An auditor had completed his examination and was about to deliver the report when he accidentally stopped in at a bank on the way to the client's office. The cashier spoke of the audit and inquired whether the auditor thought that a note for $15,000, due the following month, would be paid. The auditor knowing that no such item appeared on the balance sheet nor in the books, asked to see the note. He found that it was a company note executed by the treasurer, who had received and misappropriated the proceeds without passing any entry therefor through the books. The auditor would have detected the fraud had he asked the bank if it held any obligations of the company.

INDORSEMENTS.—In checking up the canceled or paid notes the indorsements should be examined. Many notes are made to the order of and indorsed by the payee, but, if discounted, bear the rubber stamp indorsement or cancellation mark of the bank. If there are no such marks, inquiry should be made, although an overdue note can hardly cause much trouble.

See page 593 for a more complete discussion of notes payable.

Partners' Withdrawals

If payments are made in currency, partners should approve their accounts as they appear in the ledger.

The practice, so prevalent, of drawing comparatively small amounts at a time and initialing a voucher, or declining to give one at all, is a direct temptation to dishonesty on the part of the cashier. Auditors should criticize the practice vigorously and suggest to partners that their withdrawals be by cheque only, and that they pay their personal bills through their own bank accounts.

Dividends

The audit of dividend payments is simple. Authorization must always be found in the board minutes, and any dividend declared, if paid, must be paid to all stockholders of record at the date named. Dividends cannot be declared as of a past date, but may be dated ahead as far as may be desired.

In the case of *Jones v. Terre Haute & Richmond R. R. Co.*,[4] Commissioner Reynolds said:

> It is certainly true, as a general rule, that a stockholder in a corporation has an interest, in proportion to his stock, in all the corporate property, and has a right to share in any surplus of profits arising from its use and employment in the business of the company; and this legal right does not depend upon the question whether he is a stockholder of long standing or of recent date. The moment a person becomes stockholder in a corporation, all the incidents of interest or quasi-ownership in the corporate property attach.

In another New York case the court refused to order the directors to pay additional dividends, although the corporation had a very large surplus, part of which was in bank and represented a sum far in excess of that actually required for current purposes, and part of which was invested in outside securities. The court said: "The discretion of the directors in regard to declaring dividends will not be interfered with in the absence of fraud or an abuse of discretion."

Dividends on Preferred Stock.—Questions arise regarding preferred stock which do not arise in connection with common

[4] 57 N. Y. 196.

or no-par value stock. Agreements between corporations and holders of preferred stock are in effect between the holders of common and preferred stock. It is entirely legal to agree to pay 100 per cent per annum on preferred stock before anything is paid or accrues to common stock; preferences as to assets and retirement are limited only by the ingenuity of lawyers and those who seek new capital. It lies in the discretion of directors whether or not to pay accumulations of dividends on preferred stock; the only reasons for compelling dividends are fraud and accumulations of funds far in excess of reasonable requirements.[5]

When preferred stock is issued at various times, it is legal and proper to apportion the dividends payable to stockholders who have not held their stock for as long periods as others.[6]

Stock Dividends.—Dividends are supposed to be distributions of earnings and accrue to the stockholder only at the time of declaration. A stockholder in a corporation having a large surplus and earning several times the amount of its dividends, is no more justified in taking a proportionate part of an expected dividend into his accounts as income than he would be in assuming that the entire surplus would be divided. When the dividend is actually declared and becomes an obligation of the corporation, it becomes, in turn, income receivable to the stockholder. When the distribution includes the surplus of two or more years which, as a matter of fact, has been capitalized, when dividends are paid in corporation's own stock such dividend (or the proceeds) cannot always be regarded as current income.

The Standard Oil Company of Indiana declared a stock dividend of 2,900 per cent; that is, the holder of $100 in stock received additional stock amounting to $2,900. Suppose the owner of one share died shortly before the declaration of the dividend, leaving the income of his estate to his wife for life and the principal to his children, the stock would have been appraised

[5] *N. Y., L. E. & W. R. R. Co. v. Nickals*, 119 U. S. 296; 30 L. Ed. 363 (1886).
[6] *Utica Trust & Dep. Co. v. Kellogg & Sons Co.*, 126 App. Div. (N.Y.) 176.

at perhaps $2,000, based on earnings of, say, 20 per cent per annum on that price. If the principle that dividends are income were applied, the widow would receive the $2,900 per share in new stock, and at her death, if no other change took place, the children would receive the original share, worth now only $100 and yielding perhaps 10 per cent per annum. This would be so inequitable and so at variance with the testator's intentions that most of the states would permit the dividend to be treated as a distribution of principal and not of income.

Precisely the same rule should apply when stocks are carried on balance sheets at very high figures and are reduced in price per share through the distribution of large stock dividends. Unless it is very clear that the declaration consists of the earnings of a recent period, the whole dividend should be treated as capital. If it can be apportioned, it is proper to apply that part of it representing a distribution of the earnings of the last year or period to current income. Where state laws govern the matter the laws must be observed. The auditor should be thoroughly informed as to the provisions of the law in this respect in his own state and in any others where he practices.

The Supreme Court of the United States has decided that stock dividends are not taxable income; the highest courts in several states have decided that stock dividends are taxable income. When tax liability is in question, federal as well as state procedure must be considered, otherwise the dividends should be apportioned as suggested in the foregoing illustration.

Capital Stock

A trial balance should be taken of the stock ledger to see that the aggregate amount outstanding is in agreement with the general ledger account. It should be noted if there is any account in the name of the company or its treasurer which was intended to represent treasury stock, but which may or may not be such.

The stock certificate books should be examined and reconciled

with the stock ledger. All canceled certificates should be inspected or accounted for. Large corporations usually register their stock; in such cases the auditor should request a certificate from the registrar. When the aggregate number of shares shown to be outstanding agrees with the books, it is not necessary to take a trial balance of the stock ledger.

Bonds

A proof should be taken of the bond ledger or register to ascertain that the aggregate outstanding is correct and is in agreement with the general ledger. Canceled bonds should be inspected or accounted for. The bond agreement should be read, and if it contains any provisions as to sinking funds, etc., the auditor should ascertain that these are carried out or a report made thereon.

All bonds which have been certified by the trustee and delivered to the corporation must be accounted for. If they have been sold for cash or issued for property, the handling of the proceeds should be followed to see that proper entries have been made therefor, thus rendering a subsequent audit possible. If any bonds have not been sold but are supposed to be on hand as treasury bonds, the auditor should ask to see them. Frequently treasury bonds are deposited as collateral for loans, and, since this fact must appear on the balance sheet, the auditor should be sure to ascertain the facts.

It should be determined whether or not the amount of interest accrued has been set up in the accounts and whether the amount due has been paid. Careful methods should be in force relative to coupons. They should be canceled effectively immediately upon receipt, and kept on file, not destroyed. The auditor should see that the canceled coupons are accounted for.

Taxes

Corporations are subject to special taxes, such as the federal income and war taxes, state franchise tax, etc. The auditor

should see that these, as well as the usual taxes on property, are provided for, and that a liability or a reserve for the tax, based on the income of the year under review, is included in the balance sheet.

In New York State there is a tax of two cents per hundred dollars of par value or fraction thereof, imposed on all transfers of stock. The seller of the stock, or his broker, pays this tax by affixing revenue stamps to the certificate surrendered. The officer of the corporation, however, who transfers the stock or causes it to be transferred is liable for the penalty for failure to pay the tax.

CHAPTER XXVII

OFFICE AND ACCOUNTING METHODS

A professional auditor is not expected to perform the functions of a cost accountant nor to reorganize office methods. Yet in detailed audits criticisms and suggestions are not only in order but are looked upon as part of the auditor's duties. It is not expected that a short discussion of office and accounting methods will take the place of a complete study of these important subjects, nor is it intended to do more than mention some of the important features of systems and methods. The professional auditor can and should make notes of what he finds during the progress of an audit. Frequently so much carelessness and inefficiency are found that a complete reorganization is necessary. In other cases less drastic means are necessary. In any case, the professional auditor who has an intelligent sense of the "high spots" to be covered (even though he is not a specialist) will perform more useful service than if he were to avoid discussion of systems and methods on the ground that a little knowledge is a dangerous thing.

OFFICE METHODS

In nearly every audit where no previous work had been done for the client, the auditor was formerly asked to note any improvements or changes which might occur to him during the progress of the audit. It did not seem incongruous that a professional accountant whose whole time is spent in examining and criticizing accounts should in the course of an extensive practice acquire experience of great value, and that he should be able to give to new clients the benefit of such experience. At the present time there is somewhat of a feeling that the auditor is

not a specialist in system work and that in order to be up-to-date an "industrial engineer" must be employed. But suppose we compare present conditions with those of about fifteen years ago. At that time stationery houses, which carried an "auditing department" as a side line, were making a great stir through advertising and traveling solicitors, and were offering to produce wonderful results, including daily balance sheets and income statements, the only requirement being the installation of their patented stationery. Offices were turned inside out and new books and blanks were installed by the ton, but for some reason the service did not measure up to the promises, and hundreds of offices discarded much of the "junk" which had been thrust upon them and went back to saner methods.

For a short time the auditor was back in favor. He had no cut-and-dried system, nor did he know before he entered an office how its system should be mapped out; but out of long experience he was able to make suggestions which cut out unnecessary work and proposed changes which embraced the use of all the latest labor-saving devices. Then came the "efficiency engineer," who again modestly affirmed that the auditor was not a specialist in systems and that he could not be expected to keep his client up-to-date. The crop of overcharged and dissatisfied patrons of the "efficiency engineer" is being heard from, and it is believed by many who have studied the situation that the auditor is coming back to his former position as a recognized authority on business systems.

The auditor should keep fully informed on the latest devices, mechanical and otherwise, for saving labor or rendering it more efficient; he should understand and be prepared to explain the relation of one department of a business to another and the advantages of co-ordination; he should study cost systems and be ready to install any required accounting system; he should acquire and follow up a knowledge of the means of imparting information by means of charts and other visual methods.

It may be urged that an auditor cannot hope to cover more

than a small part of the field of auditing within a considerable period of practice and that to expect him to take over the work of a system specialist is unreasonable. The answer to this is that no one can be a good auditor without picking up all of the rudiments of systematizing, and that in any event system is a matter of evolution.

Ready-made systems have been popular, but never successful. No system works out well unless a good man studies the concern and becomes acquainted with its personnel before he starts, and then "lives with the job" until its completion. The auditor may not be able to handle many such engagements, but he should not allow the so-called system experts to bluff him out of remunerative work. He is probably better qualified to perform it than anyone else.

Styles of Books and Records

The auditor should note by actual inspection whether or not the records are kept economically and efficiently. If the old-fashioned bound books are in use and if loose-leaf records would be an improvement, he should recommend the change. On the other hand, it may be that some records are being kept on cards or loose leaves which could be written up more readily and referred to more easily in bound books. In such a case the latter should be recommended.

In view of the elasticity and convenience of cards and loose-leaf records, these systems are becoming more and more popular. In the early stages of their use it was feared that the leaf or card might be lost, destroyed, or easily altered, but after a number of years of experience this fear has practically disappeared.

Books as Evidence

Aside from the question of fraud, it is always desirable that books and records be kept neatly and accurately, and that they be complete and co-ordinate. In other words, there can be no possible argument against accurate and creditable books of

account, but serious loss may result from inaccurate and incomplete records. In the course of time a considerable number of business enterprises are compelled to engage in litigation, either as plaintiffs or defendants, in which the books of account must be produced and offered in evidence, and many cases are lost through lack of evidence on some vital point on account of insufficient or discreditable data.

The auditor has many opportunities of dealing with the wrong kind of books, which experiences will serve as examples when he tells his clients what not to do.

Loose-Leaf Records

It was formerly held that loose-leaf records were not proper and sufficient evidence, by reason of the supposed danger of substitution, but business custom and convenience forced a change, so that today these records, when bearing on their face all the signs of regularity, are admitted without question.

The chief point to bear in mind in any event is the effect on a jury. Carelessly kept bound books may have an adverse effect, while neatly kept loose-leaf records, in binders, may impress the jury as containing complete and dependable records of the transactions in question.

Erasures

The matter of erasures is one to which the auditor should give some attention. It directly affects the neat-looking pages which some bookkeepers love, but it may be laid down as a general rule that an incorrect figure ruled out, and with the correct amount inserted above, always stands for itself, while an erasure or alteration is sometimes hard to understand. If it should develop at some later day that the altered figure is one required to base an action or defense upon, the position of the clerk responsible therefor is not an enviable one.

The one great factor is accuracy, and to this beauty must, if there is need, be subordinated.

Original Records Necessary

The foregoing remarks lead up to a consideration of the value of records which are merely transcripts of others, or to which the entries in other books have been posted.

In England it is customary to keep certain original records in more or less "rough" form, and subsequently transfer the entries to "fair" books. In such a case the moment it is shown that a certain book is merely a copy of another, and was written subsequently, it loses most of its value and the original record is called for. If destroyed, the entire case might be lost.

This possibility contains a twofold lesson: It emphasizes the desirability of making all original records part of the double-entry system of accounts without rewriting, and in addition insures the preservation of records which may be called for when least expected.

Mechanical Devices as an Aid to the Auditor

The auditor should be familiar with the mechanical devices which are used to record, classify, and compile data in business. Except in very small concerns one or several mechanical devices are always found in use and to a large extent the system of internal check is dependent on results obtained through the use of, or is verified by, these machines.

An examination may be made where the value of the use of machines is not appreciated. It is the auditor's duty in such cases to recommend their use and to give illustrations and explanations which will encourage the client or his employees to at least make an investigation of the value of the machines which should be used in his particular case.

The auditor, because of experience in many concerns, can testify that as a rule the records in those establishments which make the fullest use of mechanical devices are likely to be accurate and complete and that in such places final reports and statistics are generally made available with a minimum of time and effort.

The client looks to the auditor to keep him informed relative to the changes and improvements in such devices. He rightfully expects the expert employed at least to mention in conversation that a certain machine is apparently being used to advantage in other business establishments to do work similar to that which is done by hand or inefficiently in the client's office.

The auditor should know to what extent he can rely on mechanical devices as dependable aids to an internal check. He should also know when to recommend or suggest the use of a certain machine. For these purposes he must have not only a superficial knowledge of the original use for which the machine was intended but also a knowledge of special uses to which the machines have been put by some experienced operators. This information he may obtain either through his contact with the work of the machines in his practice or from the representatives of the manufacturers.

Some of the types of machines and their purposes are mentioned in the following paragraphs. There is also given a list of some of the work which may be done to advantage with the aid of mechanical devices and the type of machines which may be used in each case.

Adding Machines—Listing. This type of machine is invaluable where it is required not only to know the total of a group of figures but also to have for reference or verification purposes a list of the items making up the total. It is possible with some machines to split the keyboard and to obtain the sum of two columns of figures at the same time.

Computing Machines. These can be used to prepare summaries, to make or verify extensions, and to perform various computations involving addition, subtraction, multiplication, division, percentages, etc. Some of these machines are so constructed that where it is necessary to make many calculations with the same multiplicand, such amounts once placed in the machine remain until all calculations are completed, thus diminishing the possibility of error and saving considerable time. In addition the multipliers as well as the result appear in the machine at the end of each calculation. Manufacturers of all types of machines furnish

specially prepared tables which facilitate the use of the machines and increase the speed of the operations.

Tabulating and Recording. A statistical machine or group of machines which combines the preparation of a record, the analysis and the tabulation of the data recorded. The information is tabulated by punching holes in cards. These cards in turn are sorted automatically, making it possible to obtain with rapidity an endless combination of figures through the use of cumulating devices. Some of these machines, in addition, have devices from which the details and results may be obtained in written form.

Billing. A combination of typewriter and computing machine by means of which an invoice is written, the extension and footings are made, and the totals of the invoices for a period are obtained. It is not possible on some machines, however, to make the extensions automatically.

Bookkeeping Machines. In some cases the bookkeeping machine is practically a billing machine with the addition of certain devices which make it possible to accumulate the debits and credits and to record the balance after each set of transactions is entered. This type of machine is supposed to be self-balancing. In other cases the bookkeeping machine is used to record the same information which would appear in an ordinary ledger, cumulating the debits and credits and recording as mentioned above. These machines make it possible to prepare many other records simultaneously; for instance, invoices, sales book entries, journal entries, etc.

Statement Machine. These machines are very similar to some types of bookkeeping machines and are used principally for depositors' accounts in banks. Provision is made for the listing of the debits and the credits and the automatic recording of the balances, with devices to call attention to overdrafts or credit balances.

Cash Registers. Transactions are recorded and summarized, and in many cases an analysis of the total is made, through the medium of this machine. A recording device makes it possible to obtain a list of the amounts collected or paid. The cash register serves as an automatic check on the amount of money involved in the transactions recorded.

Automatic Money Changing. This device is particularly useful where coins are handled. It makes the computation and automatically selects and delivers the coins required to give exact change from a larger amount.

Coin Counting. Where it is required to sort and count coins of miscellaneous denominations, this machine is invaluable since it performs these operations automatically. Some of these machines have attachments which wrap coins automatically to make up definite round sums.

CHEQUE PROTECTOR. These devices operate by perforating the amount of the cheque, printing the amount of the cheque in full on plain or impregnated paper, or shredding the paper over the amount of the cheque and the name of the payee, the purpose being to make it impossible to make alterations.

TIME RECORDING. These machines make it possible to have an automatic record of the time when the employee starts work and finishes work, including the time in and out at noon or after hours, either on the job or day basis.

TIME RECORDING AND CALCULATING. A record of the elapsed time, automatically excluding lunch or supper periods, may be obtained from this type of machine. In addition some machines have devices which automatically calculate the wages to be paid, overhead to be charged, and some of the other data required in connection with the pay-roll.

PREPARATION OF MONEY FOR PAY-ROLLS. This machine is invaluable as an aid in putting up pay-rolls, in that the number of each denomination of bills or coins required to make up each item in the pay-roll can be ascertained automatically from the machine, which lists the amount of each item at the same time. It can also be used to put up coins to make up amounts under one dollar.

WEIGHING MACHINES. The ordinary weighing machine has been supplemented by a variety of machines which compute automatically prices, etc., or measure quantities or weights to be delivered.

CLOTHING MEASURING MACHINE. This instrument is valuable to expedite the measuring of cloth and to prevent loss due to inaccuracies. The instrument is equipped with a device for computing the cost of the goods measured. This makes it useful in taking inventories.

STAMP AFFIXER. By means of this device stamps are affixed to envelopes and the number of stamps used is registered in the machine.

ADDRESSING MACHINE. Provides a permanent set of plates or stencils from which cards, circulars, or letters in large numbers are accurately addressed in a minimum of time. When the addressing machine is used to send out dividend cheques, customers' statements, and other financial data, the auditor may use the mailing lists prepared from the plates and stencils to verify certain transactions.

SLIDE RULE. When there is a series of multiplications or divisions to be made or a number of percentages is required, the slide rule can be used to advantage. It may be carried in the pocket and its price is so low as to recommend it for general use wherever computations are made.

PHOTOSTAT. By means of this machine one can obtain photographic copies of reports or of any documents for court or other use, thus making

certain that no errors appear in the copies submitted. It is usually quicker and less expensive than are hand copies.

TELAUTOGRAPH. This machine is used to transmit written messages. It reproduces at the receiving end of the wire a facsimile of the message written at the other end.

In addition to those machines mentioned, there are many other devices such as cheque-signing machines, multigraphs, time stamps, envelope sealers, dictaphones, dictographs, numbering machines, automatic typewriters, automatic letter openers, etc., to which the auditor's attention is drawn from time to time. There are also many registers or meters from which data is taken to prepare entries in books, such as gas, electric and water meters, cash fare registers, taximeters, etc.

Work Which May Be Done with the Aid of Mechanical Devices

NATURE OF WORK	TYPE OF MACHINE
CASH:	
Receiving and disbursing currency	Automatic money changing
	Coin wrapping
	Coin counting
	Cash register
Receiving and disbursing cheques	Cheque protector
	Cheque signing
	Adding machine—listing
	Computing
	Numbering
	Telautograph
	Addressograph
Preparation and verification of record	Billing
	Computing
	Adding machine—listing
NOTES RECEIVABLE:	
Preparation and verification of record	Billing
	Bookkeeping
	Computing
	Adding machine—listing
Interest calculations	Computing
	Slide rule

Nature of Work	Type of Machine
Accounts Receivable:	
Preparation and verification of record	Bookkeeping Statement Tabulating and recording Computing Adding machine—listing
Mailing statements	Addressograph Stamp affixing
Securities:	
Preparation and verification of record	Billing Bookkeeping Computing Adding machine—listing
Inventories, Physical and Perpetual:	
Preparation and verification of record	Billing Bookkeeping Tabulating and recording Computing Adding machine—listing Cloth measuring
Plant:	
Preparation and verification of record	Billing Bookkeeping Adding machine—listing
Calculation of depreciation	Computing Slide rule
Prepaid Items—Deferred Charges:	
Preparation and verification of figures for rent, interest, taxes, royalties, unexpired insurance premiums, etc.	Computing Adding machine—listing Tabulating and recording Slide rule
Notes Payable:	
Preparation and verification of record	Billing Bookkeeping Computing Adding machine—listing
Interest calculations	Computing Slide rule

Nature of Work	Type of Machine
Accounts Payable:	
Preparation and verification of record	Bookkeeping Tabulating and recording Computing Adding machine—listing
Accrued Expenses and Liabilities:	
Preparation and verification of figures for rent, interest, taxes, wages, etc.	Computing Adding machine—listing Tabulating and recording Slide rule
Bonds, Mortgages Payable, etc.:	
Preparation and verification of record	Billing Bookkeeping Adding machine—listing
Capital Stock:	
Recording and verifying	Bookkeeping Adding machine—listing
Sales:	
Preparation and verification of record	Billing Cash register Numbering
Analysis and distribution	Computing Tabulating and recording Adding machine—listing
Purchases and Expenses	
Preparation of requisitions Examination of invoices	Billing Computing Adding machine—listing Numbering
Recording or vouchering	Billing Bookkeeping
Analysis and distribution	Computing Tabulating and recording Adding machine—listing
Pay-Rolls:	
Preparation of record of time	Time recording Time recording and calculating

Nature of Work	Type of Machine
Preparation of roll	Computing Adding machine—listing Billing Addressograph
Disbursing	Preparation of money Automatic money changer Coin counting
Analysis and distribution	Computing Tabulating and recording Adding machine—listing
General:	
Receiving and delivering	Weighing Computing Adding machine—listing Billing
Interest and discount calculations	Computing Adding machine—listing Slide rule
Preparation of stock record	Billing Adding machine—listing Tabulating and recording
Mailing	Addressograph Time stamp Stamp affixer Envelope sealers
Preparation of financial statements and statistics, including percentages	Photostats Computing Adding machine—listing Tabulating and recording Slide rule Multigraph

Saving to Society by the Use of Mechanical Devices.—An examination to determine the "saving to society" through

the use of one of the computing machines, the comptometer, was made recently by the author's firm. The following quotations are made from the report on this examination:

While we recognize the many shades of meaning applicable to both of the words "saving" and "society," and are well aware of the possibility of savings from which society may receive no benefit, we have so confined the use of these words in this connection that a "saving to society" shall be understood to mean the avoidance of spending or losing, or the prevention of waste, which make possible, at the same total cost as formerly, greater production, or broader distribution, or which reduce the cost of such activities, or in other ways benefit mankind as a whole.

A list of them would include actual saving in time; savings due to greater accuracy; savings in stationery; savings made possible as the result of the more prompt receipt by executives of reports of one kind and another; savings in space and savings due to the lower salaries demanded by Comptometer operators, as compared with mental calculators. It should be borne in mind, however, that savings for which the use of Comptometers appear to be responsible are many times largely attributable to a superior organization, without which the value of the instruments themselves would not be so evident.

The results of our interviews with forty-nine owners of 719 machines are tabulated as follows:

Estimated Saving for each Comptometer	Number of Owners	Number of Comptometers	Annual Saving at an Assumed Salary of $1,200 per Clerk
No clerks	3	9	
1/2 of a clerk	2	4	$ 2,400.00
5/6 of a clerk	1	18	18,000.00
1 clerk	15	212	254,400.00
1 1/2 clerks	5	75	135,000.00
1 2/3 clerks	1	3	6,000.00
2 clerks	10	167	400,800.00
2 1/3 clerks	1	3	8,400.00
2 1/2 clerks	2	49	147,000.00
	40	540	$972,000.00
No information available	9	179	
	49	719	
Average saving per Comptometer			$1,800.00

The test conducted by us consisted of work of the sort that occurs in every-day routine of commercial accounting, including such as the computation in connection with the preparation of a production and stock-on-hand report; the calculation of percentages; figuring tonnage, inventory items and discount; verification of freight way bills; footing and cross-footing. The schedule was planned to keep an average clerk busy for a week. Neither clerks nor operators understood that they were doing anything but some regular work.

In this test, the average time required by clerks was 43 hours, 34 minutes; by Comptometer operators, 16 hours, 7 minutes—a net saving of nearly 1 3/4 clerks for each Comptometer. In addition it should be noted that compared with 64 errors made by the operators, the clerks were guilty of 587 errors.

USEFUL BOOKS.—That familiarity with the types of machines should be supplemented with a knowledge of the books which illustrate the many and diverse uses of the machines, is brought out in a publication of the Western Society of Engineers, *Origin of Modern Calculating Machines*, by J. A. V. Turck, from which we quote:

A superficial examination of one of the instruction books of the "Comptometer" will convince most anyone that it is not only the mechanism of the machine that made the modern calculator so valuable to the business world, but also the schemes laid down for its use. Instructions for figuring multiplication, subtraction, division, square root, cube root, interest, exchange, discount, English currency, etc., involved hard study to devise such simple methods and rules.

The instruction books written by Felt for the "Comptometer, the Modern Calculator," reflect the genius disclosed in the invention of the machine itself.

Filing Systems

With the unit system of records has come the unit system of filing. Press copy books are becoming a rarity and have been discarded by most modern offices. Documents, correspondence, etc., are now filed in vertical files and in readily accessible form.

Some modern offices retain the old system of making a carbon copy of each letter. In the mailing department a press copy is

also made in a letter book. The carbon copy takes the place of a "tickler" and is filed so that it comes up for further attention on the day decided upon. The letter book impression is taken just before the letter is put in the envelope. It records the signatures and other identifying marks. It is properly indexed, and becomes an additional safeguard in case of the loss of the carbon copy or the unwarranted alteration of the letter.

Essential Features.—The essential features of a good filing system are:

1. Certainty of obtaining any paper or all papers on a particular subject.
2. Rapidity of obtaining filed papers.
3. Rapidity of filing papers.
4. Cheapness of operation.
5. Simplicity.
6. Small space required.
7. Cross-reference, numbering, etc.

Report of Commission on Economy and Efficiency.—In a report on the handling and filing of correspondence, ex-President Taft's Commission on Economy and Efficiency made the following suggestions. These apply with as great force to the average business corporation as to the government service.

1. That all correspondence shall be filed flat in vertical files.
2. That all correspondence should be filed by subjects arranged upon a self-indexing basis.
3. No book or card record of correspondence is desirable.
4. That carbon copies should supplant press copying.
5. That the employment of the dictation machine (phonograph) for dictating should be extended widely.
6. That transparency or "window" envelopes should be used.
7. That forms that must be filled in on the typewriter should be so arranged as to facilitate the work.
8. That on internal correspondence no salutation or complimentary closing should be used and that the initials of the person addressed and the writer should be used instead of full names.

Copying

If many copies are desired, the multigraph, the revolving duplicator, or the old-fashioned flat duplicator may be used. The revolving duplicator is perhaps most popular, because it requires only the typewriting of a waxed-paper stencil. For work requiring more than a thousand impressions, the multigraph or one of the several makes of printing machines is preferable. When exact copies are required, or when only a few copies are desired, photostatic copies are the most satisfactory.

Mailing Department

The handling of mail is important and usually constitutes a separate department. Incoming mail usually contains remittances in cheques and cash, and has proven more than once a simple source of illegitimate wealth to enterprising but ill-paid clerks and cashiers. Some responsible person—preferably an officer of the company—should have charge of the incoming mail. As it is opened it should be distributed to baskets designated for the various departments, and should be delivered with as much care as is used in opening it.

Outgoing mail must be handled differently. The stenographers who write letters should address the envelopes at the same time; then, instead of both being delivered to the executive, the letter only should be delivered, while the envelope (together with any inclosures) should be sent to the mailing department. When the letter has been signed it is sent to the mailing department, where it is put in the envelope, with the inclosures, and is sealed, stamped, and mailed. It is the duty of the mailing department to keep posted on changes in closing hours for the various domestic and foreign mails.

Stock on Hand

In many cases the auditor finds it practicable to introduce a perpetual inventory of stock on hand. He may base his

suggestions on the following general recommendations quoted from *The Accountant's Manual*, Vol. II:

1. Debit and credit accounts should be opened, as far as possible, for each description of stores used. On one side of the accounts the receipts would be entered, showing the date, weight, quantity, or number, and other particulars; and, on the other side, the stores issued from time to time would be entered, with such particulars as were necessary or suitable, the difference representing what ought to be in hand, or thereabouts, as, in accounts of this kind, the balance shown upon the accounts can hardly be depended upon exactly.

2. It is the opinion of practical mill owners and managers that in many cases a really efficient and exact check on stores is not practicable. It could, no doubt, be devised, but the detailed work in connection with it, and consequent labor and expense, put it out of the range of every-day business, whatever theorists may say. But many useful rules may be laid down preventive of fraud and waste, amongst others the following, taken from actual experience:

(a) Where stores are distributed for use upon a specific job, the job should be stated, with the weight, quantity, etc.

(b) If material of the same kind is distributed to various men for the same purpose, a comparison should be made between the results produced by each. If discrepancies are found, inquiries should be made, and doubtless in some cases a good explanation could be given: e. g., use of old machinery or appliances, etc.

(c) The storeroom should be situated in a convenient place, and be in charge of a competent man who combines practical knowledge of the stores with sufficient bookkeeping experience to appreciate the importance of account keeping.

(d) The principal, or manager, should make a point of examining at times the stock ledgers and exercising general supervision of the department. Frequent and unnotified visits should be made, and the storekeeper, if possible (it is not always possible), changed (occasionally).

(e) Some kinds of stores should never be given out unless the used-up stores are returned. For example, a workman making requisitions for files, brushes, and like things, should be supplied only on his giving up the old articles. This is a very good check when the nature of the stores will allow of its application.

Stock Records.—Stock accounts should show quantity as well as value, since one forms a good check upon the other.

The forms used should provide for an opening balance or inventory, to which should be added daily the quantity and value of the material purchased or manufactured. Provision should be made for totaling these debits and for deducting therefrom the quantity sold and its *cost value*. The balance should agree with an actual inventory.

A more detailed form used by many concerns provides columns to show not only the balance and purchases daily, but also the sales and the new balance. Noted at the top of the sheet or card is the minimum quantity of stock to be carried, as well as the maximum quantity. At certain times when the stock reaches a low point, the records are checked by comparison with an actual inventory. As a consequence the taking of inventory is not left until the end of the period, but is performed continuously.

Business is so varied in its nature that some lines do not permit of a regular system of stock accounts—nor is it especially necessary in some cases, such as, for example, traders dealing in small articles broken from bulk. While different methods of check must be employed in such cases, there are some general forms which may be adopted and which will be found practicable for ordinary lines of business.

Stock Records at Sales Prices.—Every trade is supposed to earn a certain percentage of gross profit, which should be based on a "mark up" from cost, not on the selling price. If, therefore, a stock account is started with the actual stock on hand valued at the purchase price, and there are added to it from time to time (say monthly), the total cost of purchases, and also the estimated gross profits referred to, this amount, less the total sales, should show the stock on hand, assuming that the gross profit named has been exactly earned. By deducting the gross profit from the sales and then crediting the stock account, the same result would be secured. This book figure can easily be verified or corrected at the time of actual inventory.

If a more accurate check on the various departments is

desired, the following method is employed: All goods are charged to departments at selling price, this having been determined in advance. Any changes in value are recorded and when the inventory is taken it is priced at cost, for the private office, and also at selling price, for the purpose of verification; so the account should balance exactly. Houses whose business reaches a large volume find that this system gives satisfactory results with but slight discrepancies. It can be extended, too, with advantage to other trades, such as retail branch stores selling cigars, groceries, men's furnishing goods, and similar lines.

Testing Records.—Another common and often useful practice in testing the accuracy of the stock count at any time is to make a comparison between the stock and sales for a particular period and a corresponding period in prior years. This, however, is only a rough test and not a definite one.

The accounts of an establishment which handles various kinds of goods should be so kept that the position of the various departments as to purchases, sales, etc., may readily be learned. Such a system serves two very useful purposes: (1) Attention is directed to any discrepancy between actual and estimated gross profits by a corresponding difference between physical and book inventories. (2) Needed information is furnished from month to month as to the probable amount of stock in each department. This knowledge serves as a guide to, and check upon, the various departmental managers; it also affords material for an interim balance sheet, if one is desired.

Gross Profits in Various Lines.—To furnish conclusive information relative to gross profits made in various retail lines is, of course, impossible. Situation, nature of the business, policy of the management, local conditions—all enter into the result, so that any attempt to outline even approximate figures would be unwise and misleading. However, any auditor can compile a table out of his own experience which should prove useful.

DESIGNING STOCK ACCOUNTS.—If it becomes necessary for the auditor to design stock accounts for any particular business, he should take advantage of whatever practical experience his clients or their managers possess, and should supplement such knowledge by his own experience. If he is so fortunate as to have an intimate acquaintance with the business in hand, he will undoubtedly find this knowledge of very great assistance.

Controlling Subsidiary Ledgers

In nearly every concern the individual bookkeepers have adopted some device for balancing their ledgers. This is usually in the form of a large "proof-sheet," on which are recorded the totals of the various books or columns from which the details were posted. Where there are a number of ledgers, each dependent upon all the others for its balance, even such a makeshift is helpful in locating the ledger that is out of balance.

But a much more practical and scientific plan is to employ in the general ledger a controlling account for each subsidiary ledger. From the various books of original record the details are posted to the subsidiary ledgers, but the totals are posted to the respective controlling accounts in the general ledger, thus keeping that ledger in balance. For instance, there may be two sales ledgers (A-M and N-Z) to which the details of the sales book are posted. In the general ledger, "sales" account is credited as usual, but in addition each of the sales ledger controlling accounts is debited with its part of the total sales.

Ledger A-M Controlling Account.....	$.....	
Ledger N-Z Controlling Account.....	.....	
To Sales Account.....		$.....

Columnar Ledgers

Another form of ledger, to which the term "self-balancing" is also applicable, is the columnar ledger. Its advantage is that a large number of customers or accounts can be carried in a comparatively small space and can be referred to with a minimum of

effort. It can be used, however, only when the number of transactions with each customer is small. It has not been found in practice to be well adapted to manufacturing and mercantile businesses and its use has been discontinued by many concerns which formerly used it.

The ledger provides a line or a double line for each account and columns for receiving debits and credits which are posted once each month, or at other intervals. The totals in each column are carried forward from page to page or are recapitulated, and the final totals should agree with the totals in the controlling accounts in the general ledger.

Another use of the tabular ledger is as a summary of charges where customers have a very large number of transactions monthly. The details are kept in a subsidiary ledger and are posted in total to the tabular ledger. It then becomes a ledger of controlling accounts, and is in turn controlled by an account in the general ledger.

Efficiency of Organization

An auditor is peculiarly fitted, upon the completion of an audit, to comment intelligently upon the efficiency of the organization. He has had access to all the records and has seen the performance of the staff under various conditions. The average client today wants suggestions relative to the perfection of his organization, and he should have them. The auditor should be able to judge whether the staff is too large, whether the arrangement of the office and the layout of the work are capable of improvement, and whether there is needless repetition of records in any department.

Many times it is possible to show laziness or inability on the part of employees, by applying the efficiency theory that for any task there is a determinable standard.

CHAPTER XXVIII

DEPRECIATION

Due to the modern development of business and industry and the enormous additions to the value of property, plant appliances, and stock-in-trade, and particularly since the incidence of high tax rates in 1917, the question of depreciation or allowance for loss of value has gained much in importance.

Indeed, the determination of proper allowances for depreciation is one of the most important which accountants are called upon to discuss. The auditor must always consider the adequacy or inadequacy of the provision made, before he can determine the form of the certificate or report which he can present.

It is important at the outset to distinguish between fluctuation and depreciation. The former is attributable to causes outside the business itself and may be a change for better or worse in the value of the assets. Entirely extraneous influences may cause fluctuation in the value of assets. Therefore it is generally admitted that since the actual manufacturing profits are not affected thereby one way or the other, these fluctuations in value should not be considered in the current accounts.

Depreciation, however, is a decline in the value of property which is certain to occur as a result of wear and tear and gradual obsolescence. It is due to the possession and use of the assets, and therefore is a part of the cost of operation. A concise definition of depreciation which has been widely used is that it is the deterioration of anything by time or use. P. D. Leake's definition, "expired outlay upon productive plant," is a good one, as is also "accrued renewals."

Before leaving the subject of fluctuation, however, it may be

well to consider what treatment, if any, a favorable fluctuation in the value of fixed assets and current assets should receive. As to fixed assets, it is generally conceded that the increase should be treated as a secret reserve. As to current assets, there is, temporarily, a secret reserve which is included in trading profits when the assets affected are realized. An unfavorable fluctuation, if apparently of a temporary character, may be disregarded; but when it is probable that the unfavorable conditions will remain until the time of realization of the assets affected, provision should be made for the loss. In other words, an unfavorable fluctuation should be charged against the period in which it occurs (as an extraordinary item), not against the period of realization.

In general, it is not necessary from a legal standpoint to charge an unfavorable fluctuation in fixed assets against income before the declaration of dividends from current net income. While these fluctuations may be disregarded in accounts, it may be desirable, however, to present the true state of affairs to stockholders by means of a note attached to the balance sheet or included in the auditor's report.

The New York Court of Appeals, in one of its decisions,[1] stated the theory of depreciation reserves in a most lucid manner as follows:

> Judicial notice may be taken of the fact that in the conduct of many industrial enterprises there is a constant deterioration of the plant which is not made good by ordinary repairs and which, of course, operates continually to lessen the value of the tangible property which it affects. The amount of this depreciation differs in different enterprises, but the annual rate is usually capable of estimate and proof by skilled witnesses. No corporation would be regarded as well conducted which did not make some provision for the necessity of ultimately replacing the property thus suffering deterioration; and we cannot see why an allowance for this purpose should not be made out of the gross earnings in order to ascertain the true earning capacity.

[1] *People ex rel. Jamaica Water Supply Company v. State Board of Tax Commissioners*, 196 N. Y. 39.

Although the charge for depreciation is recognized by the law, and provision is made therefor in the forms supplied by the Treasury Department in connection with the federal income tax law, there is a wide difference of opinion as to the amount of the allowance to be made from time to time. Many company officials prefer to regard depreciation charges as flexible. They adjust them to meet the conditions of different years, so that in time of large profits the allowance shall be large, and during bad years the allowance small, or none.

This, however, is entirely opposed to sound accounting principles, and the Treasury Department here agrees with the opinion of the accounting profession. It is important that there should be some fixity in regard to the rate of depreciation to be allowed. Under the system of varying charges for depreciation it is impossible to fix an intelligent basis of rates, and comparisons with other years are practically worthless. If the business man, whether in the railroad world or elsewhere, passes over one year without making any allowance for depreciation, it results in a misrepresentation of conditions at the end of that year, and it is unjust and incorrect in every way to expect a good year to bear the burden of depreciation which has occurred in one or more bad years.

In the administration of the income tax laws some tax inspectors have taken an attitude, prejudicial to good accounting practice, by insisting on the reduction of reserves to insufficient amounts. These incorrect views, however, have rarely been sustained by Treasury officials.[2]

When Fixed Rates Are Not Applicable.—The fixed rates referred to in the preceding discussion are based on normal wear and tear. When machinery is worked overtime, or when labor conditions make it difficult to secure and retain efficient forces, it is necessary to increase the normal rates. The Treasury Department has recognized this principle.[3] Obviously no rule

[2] See Montgomery, *Income Tax Procedure*, 1921, pages 839–840.
[3] See *Income Tax Procedure*, 1921, page 703 *et seq.*

can be laid down to fix the increases; as the causes are special, the rates vary correspondingly.

Causes of Depreciation

The various classes of depreciation have been very clearly described by Professor M. E. Cooley:

1. Depreciation Due to Wear and Tear and Exposure to the Elements. This is continuous. All elements have a wearing life varying with the element itself. No element can be completely worn out; it can be worn only to a point below which it becomes unsafe or no longer serves its original function. In practice the average condition of all elements must be maintained at a high percentage of the original cost if the property is to serve its purpose properly. This percentage varies from 75 per cent to 85 per cent of the cost new of the property. The difference between this percentage of from 75 to 85 and the original 100 is a depreciation which is inherent in the property and cannot be dispensed with. It must be met by a sinking fund, or its equivalent, otherwise this part of the original investment becomes lost.

2. Depreciation Due to Accidents; a Sudden Depreciation. An engine or a boiler may be wrecked, and with it, other machinery. This might, and probably would, involve a considerable expense for repairs or replacement besides possibly crippling the plant in part. Cars may collide or a car may drop through a bridge. A bridge itself may fall or be carried away by floods. A storm, as a cyclone, may work havoc, entailing costs in excess of those proper to be charged to ordinary maintenance of property.

3. Depreciation Due to Inadequacy. Cars suitable in the past have already been superseded several times by larger and better cars. This has rendered the track, structure, and bridges inadequate, and as more power is required to propel the larger cars, the power plants have become inadequate. The public demand is largely responsible for this depreciation due to inadequacy.

4. Depreciation Due to Obsolescence. This, while closely allied to the depreciation due to inadequacy, is different in that it embraces changes due to advance in the art. More efficient and effective machinery has appeared which must be substituted for the old to keep abreast of the times. For example, in steam-engine practice the turbine has come into general use during the past five years and the art of steam turbines is at the beginning. Generators adapted to piston-engine practice are not adapted

to steam-turbine practice and must also be changed. Boilers adapted to piston-engine practice must be replaced to carry the higher pressures required. Condensers must also be changed to secure the better vacuum required to realize the full advantage of the steam turbine. Owing to the rapid disappearance of coal beds, the price of fuel must advance, and this presumably will before many years force the adoption of the gas producer and the producer gas engine. Water powers are wisely being developed, but to utilize them requires the scrapping of large parts of the machinery in use at present.

Repairs and Maintenance

It is an accepted rule that repairs and all other expenses of maintenance should be charged against income. An exception is found to this rule in cases where partially worn-out or run-down plants are purchased with the intention on the part of the new owners to rehabilitate them so that they can be operated efficiently. It may be assumed that the purchase price takes the poor condition of the plant into consideration, in which case the entire cost of the repairs and renewals necessary to rehabilitate the plant may properly be capitalized.

The auditor should not decide on the amount required for depreciation until he has scrutinized the repairs account, since in this account he may find that charges have been made for renewals and replacements which, so far as they go, apply in lieu of a depreciation reserve.[4]

If a machine could be built like the "one-hoss shay," this question would not arise and a depreciation reserve would work out exactly, but under modern conditions it invariably happens that a machine wears out one part at a time, and if the parts are replaceable, the life of the machine as a whole may be extended almost indefinitely. Obsolescence and inadequacy are the practical factors which operate against a fair test of the possible life of present-day plant and equipment.

Henry Floy, the eminent engineer, cites the following instance:

[4] For a discussion of the relation of depreciation to repairs see Montgomery, *Income Tax Procedure*, 1921, pages 844–847.

For example, the life of the ordinary steam engine may be taken at twenty years, but it is not uncommon to find engines still in use that are very much older than this. The writer noted, within a few months, that a vertical engine installed in England in 1856 had recently been equipped with condenser, supplied with superheated steam, and was still in use at fifty-five years of age, giving economical and satisfactory results.

Methods of Applying Depreciation in the Books

The following table shows the results of different methods of calculating depreciation[5] over a period of ten years upon an article costing $1,000 with a break-up value of $100 at the close of the decade:

Year	Fixed percentage Method. 10% of Total Depreciation	Fixed Percentage Method. 20.57 %* on Diminishing Value	Sinking Fund Method. At 5% Compound Interest
1	$90.00	$205.70	$71.55
2	90.00	163.38	71.55
3	90.00	129.78	71.55
4	90.00	103.08	71.55
5	90.00	81.88	71.55
6	90.00	65.03	71.55
7	90.00	51.66	71.55
8	90.00	41.03	71.55
9	90.00	32.59	71.55
10	90.00	25.87	71.55
			$715.50
Compound Interest at 5%			184.50
TOTALS	$900.00	$900.00	$900.00

*$20.57\% = 100\left[1 - \left(\frac{s}{a}\right)^{\frac{1}{n}}\right]$

s = $100 scrap or residual value
a = $1,000 or original value
n = 10 years or number of periods

[5] For United States Treasury rulings on methods, see Montgomery, *Income Tax Procedure*, 1921, pp. 858–859.

1. The Fixed Percentage Basis.—This method is the most popular and is the one in general use. It is applied as follows:

(a) On a flat basis, e.g., if the life of a machine is ten years, one-tenth, or 10 per cent of the cost less estimated scrap value is charged off annually.

(b) On a reducing scale basis, i.e., a rate is ascertained which, when applied to the original cost and on the diminished value thereof as periodically determined, will reduce the book value to scrap value at the end of its estimated life.

Method (a) is more generally followed than (b), although there is in use a method which is a cross between the two and which is not scientific. It consists in charging the rate as determined under (a), but in applying it to the reducing value instead of to the original cost. For instance, if the life of a boiler is estimated at ten years, 10 per cent per annum is set aside, but on the diminishing value. If the table on page 626 were calculated on this basis, the book value would be $348.68 at the end of the tenth year, instead of $100 as under the other methods.

Nevertheless, this is a popular method and must be reckoned with. The fact of the matter is that when an executive directs a clerk to "charge off 10 per cent for depreciation," he does not stop to consider whether it means of the original cost or the reduced value.

The theory of and advantage claimed for (b) is that repairs and maintenance are very light during the early years of a machine and very heavy during the later years. In both (a) and (b) it is contemplated that all maintenance costs are to be charged off in addition to the depreciation.

Roughly speaking, with (b) the aggregate of depreciation and maintenance is the same each year, whereas under (a) the aggregate during the first years is light and during the last years heavy.

2. Sinking Fund Method.—If it is proposed to set aside such a sum periodically as will equal the original cost of a machine (less scrap value) at the end of its estimated life, it is customary, after taking into consideration the average rate of interest which can be secured, to pay into a fund a fixed amount periodically. The aggregate thereof, together with the accumulated interest, equals the amount required to renew the machine in question. This method is seldom followed. There is good authority, however, for its use where a single large piece of property is being operated.

This point is well expressed by Mr. Floy:

> In all cases involving a consideration of the expenses of keeping a property in operation, there should invariably be included allowances to cover all ultimate depreciation and replacement. For a small company or where relatively large proportions of the invested capital are locked up in a few or single pieces of property, it is preferable to accumulate, in advance out of operating income, reserve funds from which to provide for all classes of depreciation. But such method may be unnecessary and possibly an inexpedient accounting complexity with large corporations, where the investments in any single piece of physical property are small, relative to the total investment. The truth of the above will be at once recognized from the following illustration. If the company which erected the Metropolitan Life Insurance building had only that property, it would be essential that funds should be laid aside annually in amounts sufficient to replace the original investment at the end of the useful life of said building.

The conflict between the Third Avenue Railway Company and the New York Public Service Commission with reference to the actual setting aside of an amortization fund and a depreciation fund is of considerable interest. The Third Avenue Railway Company had gone through a receivership and the par value of the securities of the reorganized company exceeded by a considerable amount the value of the physical property owned by the company. The commission directed that a fund be created into which the company should pay annual instalments out of its income, so that at maturity of the outstanding securities an

amount would have been accumulated which, together with the company's other property, would equal the par value of the outstanding securities.

The commission also directed that there be set aside annually at least 20 per cent of the earnings for current maintenance and future replacements (depreciation), the unexpended portion of this amount to be "credited" to a separate depreciation fund at the end of each year.

The opinion of the commission is of sufficient importance and interest to warrant the reproduction in full of that part dealing particularly with the amortization and depreciation funds.

Amortization of Discounts. The requirement that discounts shall be amortized is a generally recognized principle. The unanimous conclusion of the Railroad Securities Commission in its recent report to the President of the United States was to this effect: "It seems to be generally agreed that no limitation should be placed on the price at which bonds can be sold, but any discount should be canceled or amortized during the life of the bonds by the appropriation each year out of annual income or surplus accumulated after the issue of the bonds of not less than the proportionate amount of the discount." The Securities Commission also said, regarding the issue of stock below par, that the difference between par value and cash received should be amortized within a short term of years, thus:

If a document says one hundred dollars has been paid, one hundred dollars ought to be paid. The most that can properly be done is to allow companies which cannot sell such stock at par to arrange for the "amortization," or gradual cancellation, of any necessary discount by appropriating, out of future income or surplus which may accrue subsequent to the issue of such stock an annual sum having precedence over dividend-payment, to be so applied on capital account as to make the deficiency good in a period of no very great length.

In order that this difference, which is in the nature of a discount upon securities, may be eliminated during the life of the bonds, it is necessary that an amount should be set aside annually out of income before dividends and interest on the income bonds may properly be paid. It is evident that the annual amount is determined by the rate at which the fund will accumulate. It is certainly not less than 4 per cent, and upon this basis the annual payment would be $180,000, plus 4 per cent upon previous payments and accumulations. If this course is followed, the company in 1960

will have a fund which, together with its other property, assuming it to be maintained as above stated, will be equivalent to the par value of the securities then outstanding.

It is apparent that if the company is able to earn only 4 per cent upon this fund, either through investments in securities or in its own property, the net deduction will be $180,000 per annum. If, however, the company is able to earn even more than 4 per cent per annum, the income above 4 per cent will work to reduce the net annual charge against income by the precise amount which the actual earnings exceed 4 per cent. If, for example, the company should be able to earn 6 per cent per annum, the net amount would be less than $100,000.

Unless some such plan is followed, the company will not be able in 1960, in refunding the bonds then due, to present as the basis for such refunding property which is equal to the par value of the securities. They will be represented in part by discounts upon issues of 1912, fifty years before.

Depreciation. The foregoing requirement has reference only to the *present* impairment of capital. This impairment of capital has resulted to a considerable extent from the neglect of the old company to make proper provision for depreciation. If the company does not reserve a sufficient portion of its revenue to replace capital consumed during the year but not requiring replacement within the year, and then proceeds to treat the entire surplus as divisible profits, it is actually violating the corporation law against the declaration of dividends out of capital just as effectually as though it sold stock and distributed the proceeds immediately in the form of dividends. Unless, therefore, careful provision is made for the creation of a depreciation reserve, there may be another repetition of the financial collapses that have been so conspicuous in the history of the street railways in Manhattan.

Under the Third Article of the first refunding mortgage and the Fifth Article of the income mortgage, the company agrees and covenants to maintain property by making needful repairs, renewals, and replacements, and under the Second Article of the refunding mortgage it further agrees that no bonds shall be issued for replacements or operating expenses. To provide for such replacements, however, there ought to be some definite provision for a depreciation reserve. The matter assumes a special importance in view of the fact that the declaration of interest upon the income bonds will depend upon a precise definition of expenses and other deductions that may be made from revenue. Without clear definitions there is an almost certain likelihood of disputes between the income bondholders and the stockholders as to the true amount of the profits. The

Second Article, Sub. a, of the income mortgage enumerates the various items of expense to be deducted from revenue and specifies depreciation or obsolescence, but leaves the amount of such charge to be determined entirely by the discretion of the Board of Directors. When it is recalled that in one case where it was the object of the company to show small earnings Receiver Whitridge testified before the Commission that the total annual depreciation amounted to $600,000, and that in a second case, where it was the object of the company to show large earnings, the same Receiver testified that depreciation amounted only to $300,000, one will realize the necessity of a more specific definition of depreciation.

In the opinion of the Commission, there should be reserved out of revenue for the upkeep of the property, including both current maintenance and future replacements, in accordance with the accounting rules of the Commission, at least 20 per cent of the operating revenue of the Third Avenue Railway. This minimum rate has been used in other mortgages and contracts, is practically the standard percentage used by engineers in appraising street railways, and more especially is the rate estimated by the Chairman of the Reorganization Committee of the Metropolitan Street Railway Company.

The Commission does not fix 20 per cent as the maximum rate or as the rate applicable to all cases. Further, if this rate should prove to be too high after a number of years, the facts may be presented upon application to the Commission for a modification of this order.

PRODUCTION METHOD.—A method of making depreciation allowances which has its advantages under certain conditions is that of charging an established rate per unit of output. This is especially applicable in the case of, say, a blast furnace where the frequency with which the linings will need to be renewed depends on the extent to which the furnace is being used. If it is being run at full capacity night and day, the wear on the linings is obviously much greater than if the furnace had not been in continual use during the entire fiscal period.

Another species of depreciation which may be said to come under the above caption is that caused in a plant by the depletion of the mines or timber lands in connection with which the plant was constructed. Most of the value of coke ovens, for instance, is gone when the mines for which they were constructed are worked

out. Consequently, in determining the amount to be written off for depreciation of mining and lumbering plants, the factor of the probable future output of the mines or lands is an important one and it is frequently found advisable to base the plant depreciation charge on the output. Certainly this should be done where it is evident that the plant will outlive the exhaustion of the mines or lands. In such cases the depreciation charges should be sufficient to absorb the entire cost of the plant, less residual value, by the time the mines or lands are exhausted, even though at that time the plant may still be in good operating condition.

The auditor should note that the depreciation charge has been brought into the books of account properly. This is important because, to constitute an allowable deduction for income tax purposes, the depreciation allowance must be charged off on the books.[6]

Sinking Fund Requirements to Retire Bonds, etc., Must Not Be Confused with Depreciation Allowances

The trained accountant or engineer recognizes the distinction between provision for depreciation and appropriations for sinking funds, and so never confuses the two terms. Not so, however, with lawyers and business men.

The modern industrial bond is not popular unless a provision is inserted in the trust deed requiring that a sufficient sum be set aside annually, or otherwise, to retire the bonds before or at maturity. It is usual to stipulate that the instalments must be provided out of earnings, and this is a wise course to follow, because it serves to keep down dividend declarations during the life of the bonds. Nevertheless, the sinking fund instalments are capital expenditure and do not properly appear among operating expenses, but should be stated as deductions from the net income when ascertained. This course fulfils the obligation imposed in the trust deed and yet does not permit the surplus to be overstated.

[6] See *Income Tax Procedure*, 1921, pages 847–848.

The sinking fund provision may be greater or less than the amount required for depreciation, aside from the fact that one is an operating expense and the other is a discharge of a capital obligation. Therefore, depreciation should be calculated and charged against earnings before the net income is determined, irrespective of the existence or non-existence of sinking fund requirements.

The common misconception of the proper treatment of compulsory sinking funds can be explained by an illustration taken from actual practice. A manufacturing corporation handling a patented device issued bonds aggregating $375,000, payable in instalments of $25,000 annually for fifteen years. Having in mind possible competition and obsolescence of its property, it was provided that the sinking fund instalments be charged against income. The president of the company had a contract under which he was to receive a bonus of 5 per cent of the net income in addition to his salary, but it was specifically provided that as to him the charges against income should not include the sinking fund instalments. In making up the first year's accounts the auditors decided that the depreciation reserve, as nearly as could be determined, should be stated as $25,000, and this amount was included among the operating expenses.

When their report was submitted to the directors, the president referred to his contract and stated that the sinking fund provision and depreciation were synonymous and that he was entitled to 5 per cent of the net income before any deduction was made for depreciation. The majority of the directors agreed with him, with the result that the company has overpaid the president $1,250 per annum for several years.

Perhaps the time will arrive when depreciation will be generally considered as a prime operating cost. If it is so treated throughout the accounts, no such misunderstanding as that above cited could occur.

The United States Steel Corporation transfers a large part of the amounts credited to its depreciation funds to the trustees of

the bond sinking funds. The corporation's and its subsidiaries' bonds are then redeemed from this fund and the amount of the bonds so redeemed do not appear as a sinking fund asset or a bond liability. This amount, however, appears as a part of the depletion and depreciation fund balance deducted from the property account with the following caption, "invested in redeemed bonds held by trustees of sinking funds, but not treated as assets."

Cost the Proper Basis

The question of depreciation should be considered only in connection with the cost of the item to be depreciated.[7] The fact that the value of the property has increased or decreased and that the cost of the replacement may be greater or less, should have no bearing on the amount to be set aside. However, if, for instance, it is the intention of the management to purchase replacements costing, say, double the price of the original property without new financing, then amounts should be reserved for this purpose from surplus.

Depreciation Is an Operating Expense

We often see a statement in published reports that a corporation has realized net income amounting to a certain sum, and that out of this net income an allowance for depreciation has been made. It is just as logical to state that a candy manufacturer had earned net income of $100,000 and that out of said $100,000 there has been set aside $20,000 to pay for the sugar consumed in the manufacture of the product.

The use of that which is consumed is a loss or expense. Machinery is consumed; sugar is consumed. You cannot say that one is an operating expense and the other is an item which need not be ascertained or taken into account until the net income

[7] This proper accounting principle is modified when tax laws or similar causes call for special treatment. For federal tax purposes depreciation should be calculated on fair values as of March 1, 1913, for property acquired prior to that date.

is shown. Net income means only one thing in the vocabulary of the professional auditor, that is, the excess of income over operating costs, expenses, and losses. It cannot be determined by taking into account *all* of the income and a part only of the charges against it. If the provision for depreciation is not such an item as can be included among the costs of operation, then it is a misnomer.

This view of depreciation is well expressed by the late Professor Henry C. Adams, writing on railroad accounts, but the principle enunciated applies with equal force to industrial accounts.

> When carried to its final analysis the question of formal depreciation charges to operating expenses is simply a question of what constitutes cost of operation, and the time when such cost shall be acknowledged in the accounts. The position which the Interstate Commerce Commission's system of accounts assumes on this point is, that the depletion of an asset which represents an investment through the use of that asset in operation creates an item of cost of operation which should be reflected in the accounts when the fact of such depletion takes place, and that a statement of net revenue made without including this element of cost in operation expenses is an erroneous statement.

After all, the problem is not so very difficult. It requires comparatively little additional work to determine the depreciation for each shop or department, and to apportion this each month to the department or shop to which it belongs. If it is thus handled in detail from month to month, we are relieved of the complicated task of attempting to calculate it at the end of a fiscal year on the plant and equipment as a whole.

Depreciation a Local Issue

The auditor must use his own judgment in passing on rates of depreciation, just as much as he does when he inspects purchase vouchers. In one locality steam coal may be $3 a ton; in another, $6. The variation may be entirely legitimate. In one locality boilers may depreciate 7½ per cent annually, in another the rate may be 15 per cent.

It is not merely a question of the life of the boilers, because no

experienced engineer or boiler manufacturer can answer the question unless he knows the use to which the boiler is subjected, the climate, the water, the class of labor, the probabilities of shut-downs, etc. And similarly with almost all other classes of property which depreciate by wear and tear. Therefore, wherever rates of depreciation are mentioned in this chapter, they must be taken as suggestive only and in a relative sense. The student without other experience can thus broadly acquaint himself with general observations and modify his views later on as he gains experience.[8]

Investment of Depreciation Reserves

It has been urged that unless an amount corresponding to the reserve for depreciation is invested in marketable securities, it is not a *de facto* reserve, but merely a book account; but this is really a matter of secondary importance. The principal point to consider is whether or not there has been charged to income a sufficient sum to cover the loss caused by wear and tear and obsolescence. So long as this is done there is no possibility of the amount thereof being paid out in dividends. It is left in the business in the form of cash or any other undivided asset. The question of its investment is immaterial.

The concern that can and does purchase securities equal to its

---

[8] "The rate of depreciation depends upon many different and variable factors, some of the most important of which are as follows:

(a) Nature and construction of buildings and equipment, together with their condition.

(b) Deterioration of plant in general and of machinery in particular, due to wear and tear.

(c) Amount spent for maintenance in the way of repairs and renewals.

(d) The invention of new methods or new machines which may or may not entirely replace the old ones.

(e) Permanency of business, and likelihood of increase or decrease in the same.

(f) Amounts previously written off for depreciation.

(g) There are many additional factors, such as amortization, peculiar and excessive uses of machines, rate of production, idleness of plant, etc., all of which enter into the problem." (Uniform Contracts and Cost Accounting Definitions and Methods, U. S. Government Interdepartmental Conference. 1917, page 7.)

depreciation reserve and retains such securities until the proceeds are needed for the purchase of machinery, etc., can certainly be depended upon to renew its machinery when necessary, even though its depreciation reserve is represented among its current or fixed assets.

The life of plant and equipment is too uncertain to warrant the purchase for purposes of the depreciation reserve, of bonds which are to be sold to finance renewals. A well-managed plant is attended to daily as to its up-keep, and renewals and changes are made as needed.

Importance of Provision for Obsolescence

It has been pointed out that actual depreciation is ascertainable. That is to say, machinery, for instance, cannot be operated efficiently if it falls below, say, 70 per cent of its condition when new. If its theoretical life is ten years and 30 per cent has been set aside during the first three years, the question then arises, what to do at the end of the fourth year. If the shop is properly managed, it is probable that the machine is worth to a going business 70 per cent of its cost and will remain so until superseded. But no manufacturer can depend on keeping up his equipment by renewing old machines in whole or in part. It is inevitable that improvements will come so long as the times produce inventors and men of initiative. Therefore the manufacturer who is willing that the product of a machine shall bear the cost of the machine continues to charge operating and to credit reserve for depreciation with such an amount as enables him to discard his old machine as soon as a better one appears.

One of the foremost efficiency engineers in this country told the author that the tendency to scrap old machines and buy new ones has often been carried to an extreme; that in some cases a new machine of twice the capacity of an old one costs much more than twice as much, and that the interest, depreciation, and other charges against the new machine more than offset the saving in time or increase in production.

Nevertheless, the tendency to discard machinery is strong, and the auditor who endeavors to charge out the cost of a machine against its product must set up a reserve for depreciation sufficient to include ordinary obsolescence, or he will find the reserve insufficient.[9]

It is not advisable to set up a reserve for ordinary obsolescence separately either in the books or in financial statements. No manufacturer cares to publish his estimate of that part of his equipment which is getting out of date.

Depreciation of Different Classes of Property

Passing from a general discussion of the rules which have the approval of competent authorities, it is desirable to study their application to various classes of assets. For the sake of convenience we will take up the depreciation of fixed assets as they appear elsewhere in this book.

Before doing so it will be of interest to note the variation in rates which apply to different classes of property, as given on pages 639–643. These tables are prepared from the exhaustive compilation of depreciation rates which appears in the *Accountants' Index*, published by the American Institute of Accountants. The table should be of assistance to the auditor in making decisions on this subject.

Land

It is usual to dismiss this item with the statement that land does not depreciate. Nothing could be further from the facts. The great bulk of arable land in the United States is depreciating through use just as much as depreciation occurs in machinery through use.

The land on which buildings are erected or which is used for storage purposes, etc., may not depreciate, and the aggregate of

---

[9] See Saliers, *Principles of Depreciation*, pages 29–30, for a discussion of the methods of figuring obsolescence.

For a full discussion of special problems relating to obsolescence which have resulted from the war, see Montgomery, *Income Tax Procedure*, 1921, pages 902–920.

Depreciation Rates

	Australia Federal Income Tax Dept.	Great Britain Board of Inland Revenue	Wisconsin P. S. Commission	Chicago Union Traction Co.	Montgomery's *Income Tax*	Nicholson and Rohrbach's *Cost Accounting*	Milwaukee Elec. Ry. & Light Co.	Miscellaneous
	(1)	(2)				(3)		
Adding machines						20		
Agricultural machinery	10							6 - 12
Apartment houses					3			3
Automobiles:					20			
Motor trucks	10	20				25		20
Pleasure cars	10	20				25		
Barns:								
Brick								3
Frame								4
Frame (without good foundation)								4½
Batteries—storage				6.6		6	10	5
Belting			5			7		10 - 33⅓
Boilers	5	5	6.6 - 8.5	6.6		5	7½	5 - 20
Bridges:								
Masonry								1
Steel								3
Wood								10
Trestles (not including rails or ties):								
Steel						3⅓		
Wood						6⅔		
Buildings:								
Brick						2½		2½ - 3
Concrete			1½			2		2
Wood			2			5		4½ - 5
Cables:								
Underground	2½		4 - 5				4	2½ - 5
Aerial lines			8⅓			5		4 - 6
Tramway cables		3						2½ - 5
Carpets and rugs								10
Cash registers	5				15			
Chemical manufacturers' apparatus	7½				15			
Coal and ash handling machinery			10	6.6		8	5	5 - 10
Conduits			2			2		2

(1) Written down value, repairs allowed in addition.
(2) Written down value.
(3) Based on:
(a) The cost of equipment.
(b) The life of the equipment.
(c) On a ten-hour day.

Depreciation Rates

	Australia Federal Income Tax Dept.	Great Britain Board of Inland Revenue	Wisconsin P. S. Commission	Chicago Union Traction Co.	Montgomery's *Income Tax*	Nicholson and Rohrbach's *Cost Accounting*	Milwaukee Elec. Ry. & Light Co.	Miscellaneous
	(1)	(2)				(3)		
Containers:								
Casks	7½							7½ - 20
Crates	25							
Conveying and hoisting machinery						6⅔-10		
Cotton mills:								
Buildings								2½
Engines, boiler, gearing								5
Machinery								7½
Dwellings:								
Frame						3		2½ - 4½
Brick or stone								1½ - 2½
Dynamos	5					5		7½
Elevators	7½-10½					5 - 7½		
Engines:								
Gas						7½		10
Steam		5	5 - 6.6	6.6		5	5	3 - 12½
Fences:								
Wire						5		
Wooden						10		7½
Fire prevention apparatus						5		
Flour mills:								
Machinery (other than power)	7½	7½						
Engines, boilers, and main shafting		5						5
Brick or stone buildings								2 - 2½
Frame buildings								3 - 3½
Foundries:								
Buildings:								
Concrete								2½
Brick								3 - 3½
Sheet iron								5 - 10
Wood								7½
Furnaces	15							7½ - 10
Equipment					3			
Flasks, patterns, and core boxes	2				10 - 20			
Furnaces	15				15	6		5
Furniture and fixtures	5				15	10		5 - 25

(1) Written down value, repairs allowed in addition.
(2) Written down value.
(3) Based on:
(a) The cost of equipment.
(b) The life of the equipment.
(c) On a ten-hour day.

Depreciation Rates

	Australia Federal Income Tax Dept.	Great Britain Board of Inland Revenue	Wisconsin P. S. Commission	Chicago Union Traction Co.	Montgomery's *Income Tax*	Nicholson and Rohrbach's *Cost Accounting*	Milwaukee Elec. Ry. & Light Co.	Miscellaneous
	(1)	(2)				(3)		
Generators—electric	5		5	6.6		5	7½	5
Harness	10							10 - 12½
Heating and ventilating system					10	5		10
Horses:								
Horses					15 - 25			10 - 25
Horses and wagons	10					12		10 - 12
Laboratory equipment						10		10
Lathes						6⅔		10
Laundries:								
Equipment					8			8⅓
Laundry plant	5							
Locomotives for local transportation:								
Steam						6⅔		3 - 10
Electric						6⅔		2 - 10
Lumber mills:								
Engines, boilers, and main shafting		5						
General saw milling plant and machinery		7½						
Traction engines, tractors, motor cars and haulage plant		20						
Machinery:								
Machinery and equipment						6 - 10		5 - 15
Ordinary manufacturing machinery	5							
Electrical equipment								10 - 15
Meters:								
Electric								4 - 7½
Gas								5 - 10
Oil						10		
Water								2.1 - 3
Motors—electric	7½		5	6.6		5½		5 - 7½
Paper mills:								
Machinery:								
Working day only		5			5			
Working day and night		7½			7½			
Buildings								2½ - 3½

(1) Written down value, repairs allowed in addition.
(2) Written down value.
(3) Based on:
(a) The cost of equipment.
(b) The life of the equipment.
(c) On a ten-hour day.

Depreciation Rates

	Australia Federal Income Tax Dept.	Great Britain Board of Inland Revenue	Wisconsin P. S. Commission	Chicago Union Traction Co.	Montgomery's *Income Tax*	Nicholson and Rohrbach's *Cost Accounting*	Milwaukee Elec. Ry. & Light Co.	Miscellaneous
	(1)	(2)				(3)		
Patterns—Standard:								
Metal, net additions						75		
Wood, net additions						100		
Paving:								
Asphalt								7
Block								2½
Brick								4½ - 7
Granite								5
Macadam								6
Piping			5	6.6		7½	7½	6
Plumbing						6		3½ - 5
Printing:								
Printing and binding machines	7½	7½						7½ - 10
Type	7½	10						10 - 25
Pumps	7½			6⅔		5		4 - 6½
Roadways and sidewalks						4		
Rolling stock:								
Industrial		5 - 7						7½ - 15
Owned by railways	2½		5 - 6⅔	5 - 8½			6 - 7½	4 - 10
Saw mills	7½	5 - 7½			6⅔			6⅔ - 10
Shafting, pulleys, etc		5				5		3 - 15
Sprinkler systems	5					5		5
Stacks:								
Brick						3		3 - 5
Steel						8		6 - 10
Standpipes						4		4
Steam power plants						6		5
Sub-station equipment						5		3 - 5
Switchboards and wiring			2 - 5	6.6		5	5	3 - 8
Tanks:								
Steel						4½		4½
Wood						8		9
Telephone equipment	5					7½		5
Theatre: stock costumes	20							
Tools:								
Loose	7½							10 - 33⅓
Machine	5					6⅔		5 - 12½
Turbines—steam			5			5	5	6⅔
Typewriters	10				20	20		
Vehicles, carts, wagons, etc.	7½							7½ - 20

(1) Written down value, repairs allowed in addition.
(2) Written down value.
(3) Based on:
(a) The cost of equipment.
(b) The life of the equipment.
(c) On a ten-hour day.

DEPRECIATION RATES

	Australia Federal Income Tax Dept.	Great Britain Board of Inland Revenue	Wisconsin P. S. Commission	Chicago Union Traction Co.	Montgomery's *Income Tax*	Nicholson and Rohrbach's *Cost Accounting*	Milwaukee Elec. Ry. & Light Co.	Miscellaneous
	(1)	(2)				(3)		
Warehouses:								
Modern fireproof steel and tile	.....	.....	.....	.....	.....	.....	.....	3
Mill construction	.....	.....	.....	.....	.....	.....	.....	4
Steel construction partly fireproof	.....	.....	.....	.....	.....	.....	.....	3
Wooden, of poor construction	.....	.....	.....	.....	.....	.....	.....	8
Fixtures	.....	.....	.....	.....	.....	.....	.....	8
Wharves:								
Docks, piers and wharves	.....	.....	.....	.....	.....	3⅓	.....	3
Wiring (inside)	5	.....	.....	.....	.....	5	.....	6
Wires and cables	7½	.....	.....	.....	.....	.....	5	6.6

(1) Written down value, repairs allowed in addition.
(2) Written down value.
(3) Based on:
(a) The cost of equipment.
(b) The life of the equipment.
(c) On a ten-hour day.

such holdings is very large, but the auditor must inquire into the purpose for which land is used, its location, etc., before he can decide offhand that the land has not depreciated.

Land used for agricultural purposes may depreciate through use, and does unless a certain rotation of crops is followed or unless fertilizers are used. The cost of the latter is equivalent to the cost of maintenance and repairs in a factory.

The price of flaxseed has increased enormously because during the early years of farming in the West the vitality of the land was exhausted by that crop to such an extent that the farmers were obliged to discontinue raising it. While this crop was exhausting the land, the farmers should have set up a reserve for depreciation. It would then have been apparent that the net income realized from the flax crop was not nearly so high as it seemed, and that wheat, while bringing in less cash per acre, would have been more profitable.

This illustration may not seem pertinent enough to warrant its inclusion in a book which is intended to be practical but the author wishes students in particular to use their imagination on every possible occasion. This is a convenient place to reiterate the advice. Heretofore textbooks on auditing have stated without qualification that land does not depreciate. If three-fourths of the land in the United States is depreciating through use, such statements should not go unchallenged.

Land fluctuates in value, sometimes violently, but such fluctuations are not to be confused with depreciation.

Buildings

It is difficult to foretell at what rate buildings will depreciate, and it is practically impossible to set a standard common to all the different classes of buildings which are found among the assets of various enterprises. When one ledger account includes both land and buildings, the depreciation usually must be confined to the buildings. As a general rule, if the allowances for depreciation take the form of the instalment plan, the annual rate of deduction ranges from 1 to 5 per cent of the original amount, the rate varying according to the workmanship, material, service to which the building is put, climate, and any other factor which may influence the life of the building. By the sinking fund system the sum to be set aside must be such as will accumulate to the cost of the building during the probable life of the building. Repairs must be charged to income, in addition to the charge for depreciation.

It must be remembered that no building will last forever. This statement is made in the face of the contrary claims of the advocates of concrete construction. Possible appreciation in land should not be used as an offset against the depreciation of buildings, unless the former is included in income and the charge for depreciation is included among the expenses. It is then apparent that an anticipated profit is being used to offset an actual expense.

A prominent engineer says that a building in which rapidly revolving shafting is employed, or in which machines operate with considerable shock, such as a number of drop forge hammers, depreciates rapidly; and that for such buildings a yearly depreciation of from 4 to 8 per cent should be allowed.

A leading appraisal company states that for some concrete buildings only two or three years old, it is necessary to apply a high rate of depreciation because the cement mixtures used do not accord with first-class practice.

New York Ruling.—The New York State Income Tax Bureau, in replying to questions on this subject, stated: "Generally, depreciation may be taken at the rate of 4 per cent yearly on a frame building and 3 per cent yearly on a brick building. These amounts should cover both repairs and depreciation."

Demolition of Buildings.—It should be noted that for income tax purposes the Treasury does not allow as a deductible loss the cost of demolition of buildings for purposes of reconstruction. It regards the amount expended as an investment of capital to be considered as a part of the cost of reconstruction. This permits corporations to carry on their books the depreciated cost of an original investment, or part of it, after the asset representing that investment has been destroyed; and in addition permits the book value of the destroyed asset to be increased by the cost of destroying it.[10]

Also it should be noted that buildings under construction are not subject to depreciation allowances for income tax purposes. The allowance begins with the beginning of the useful life of the building. The term "useful life" has been interpreted as meaning the period during which an asset may be used for the purpose for which it was acquired.[11]

[10] Cumulative Bulletin Number 4, page 178; O.D. 845.
[11] *Ibid.*

Leaseholds

Premiums paid for leases may be considered as the price of a terminable annuity equal in amount to the difference between the annual value and the annual charges. In case of short-term leases it is most convenient to charge a proportionate part against each year's revenue, but this method is not desirable in case of longer leases, because it is not sufficiently accurate. The annuity method is more desirable where long leases are concerned, because the early years should not bear the carrying charges on the full purchase price in addition to a prorated instalment of the principal.

Sometimes at the expiration of a lease there arises a claim for damages based on the condition of the premises. It is not usually possible to restrict the use, under a long lease, to ordinary wear and tear. The amount thereof varies according to circumstances, but the possibility of this contingency must be taken into consideration in making the calculation. When a lease requires the restoration of the premises at the termination of the lease, to their original condition, the estimated expense of such restoration may be spread over the term of the lease, and an amount thus reserved sufficient to make the restoration.

In England, where leaseholds are far more common than in the United States, the annuity system is usually applied. Under it interest on the investment is charged each year on the diminishing value of the lease. The amount of depreciation is fixed, but as the reserve grows larger the interest charges decrease.

When new buildings are erected on leased land the full cost thereof must be charged off during the term of the lease, unless there is provision for revaluation at its expiration. In any event the expired value of the assets, as shown at the time of expiration of the lease, must be absorbed equitably during its term. The annuity system is suggested as the plan most suitable for this purpose.

Machinery and Equipment

The proper rate of depreciation for machinery has been the subject of more discussion than any other allowance of this nature. So many factors enter into the life of machinery that it is absolutely necessary for each machine to carry its own individual rate. This can be determined solely by experience. In case of two like machines used in different factories, there may be a considerable difference in length of life and service; consequently no hard-and-fast rule can be laid down. But in addition to charging all repairs and part renewals to operating, from 5 to 12½ per cent should be written off annually from the original cost to provide for normal depreciation from wear and tear and ordinary obsolescence.

Regardless of obsolescence, the life of a heavy machine tool is usually considered as from 15 to 20 years. The rate adopted by the National Machine Tool Builders' Association for machinery is 10 per cent. This rate implies favorable conditions and is to be figured on original cost.

A subsidiary ledger should invariably be kept containing details of the summary machinery accounts which appear in the general ledger. This aids in determining rates of depreciation and is of great value in case of fire or in determining the amount to be written off in case of sale. When the items are of sufficient importance, a separate account should be kept for each item with original cost, additions, deductions, and a memorandum record of the amount of depreciation charged to date.

Repairs versus Depreciation.—A part of cost of the ordinary wear and tear for which depreciation reserves are created is sometimes charged to operating expenses as repairs and maintenance. Small parts of machines are constantly wearing out or breaking and being renewed. In some cases nearly every part of a machine is renewable, and it is quite conceivable that at the end of five or six years a machine may be largely renewed and be about as good as new. If, under these conditions, depreci-

ation at the rate of 10 per cent per annum is reserved, without any adjustment for new parts supplied, it is evident that the reserve is too large.

A reduction in ordinary depreciation rates is not advocated, but the careful auditor should study the relation existing between the depreciation reserve and the physical condition of the machine. Professor Cooley's description on page 624 reminds us that machinery, to serve its purpose properly, must be maintained at from 75 to 85 per cent of its original condition;[12] therefore there is no necessity for providing the cost of maintenance plus the wear and tear element of depreciation if the latter is fully covered by the former.

AUTHORITATIVE RATES.—The following tables compiled by George A. Cravens and published in the *Electrical Review*, April 23, 1910, are of interest. Rates of depreciation on various kinds of equipment as estimated in connection with litigation and by recognized authorities are shown.

Table II indicates the variation caused by light or heavy use.

TABLE 1

Items	Chicago Traction Commission	Chicago Union Traction Co.	Milwaukee Electric Railway & Light Co.	Wisconsin Railroad Commission	Average English	Average Scotch Practice	Philip Dawson	Stone & Webster	Industrial Power Plants	Professor G. F. Gebhardt	Miscellaneous Sources
Boilers	3.5–10	6.6	7.5	6.6–8.5	5	5	8–10	5	2.5–3.3	4–6.6	7.5
Steam Piping	3.5	6.6	7.5	5	5	5	8–10	5	2.5–3.3	5–8	5
Auxiliaries	5–10	6.6	5	6.6–8.5	5	5	8–10	5	4–6.6	3–5	7.5
Steam Engines	3–10	6.6	5	5–6.6	5	5	4–6	5	2.5–5	4–6.6	5
Steam Turbines			5		5	5	7–9	5	2.5–5	4	4
Belted Generators	5–10	6.6	7.5	5	5	5	5–10	5	6.6	3.3–4	7.5
Wires and Cables	2	6.6	5	2	5	3	3–5	5	4–6.6	5	5
Switchboard, etc	2	6.6	5	2	7.5	5	8–10	5	2–5		5
Motors	5–10	6.6	5	5	5	5	5–8	5	4–6.6	5	5
Storage Batteries		6 6	10		5	5	9–11	5	5–10	6.6	10
Shop Equipment	3–10	5	7.5	3.3–10	7.5	7.5	12–15	5	4–10		7.5

[12] In other words, normal and unavoidable depreciation, which is measured by the depreciation reserve, ranges from 15 to 25 per cent of original cost of machinery, even when all required repairs are being made. For a discussion of this subject, see E. A. Saliers, *Principles of Depreciation.*

TABLE II

Items of Equipment	Light or Intermittent Service	Heavy or Continuous Service
Boilers, Water Tube	4–6.6	5–8.3
Boilers, Fire Tube	5–6.6	6.6–10
Piping, Steam and Water	4–5.5	5.5–8.3
Auxiliaries, Steam	3–5	4–6.6
Engines, Steam	4–5	5–6.6
Turbines, Steam	3–4	4–5
Generators, Belted	4–6.6	5–8.3
Wires and Cables	3–5	4–6.6
Switchboards and Instruments	2–5	5–8.3
Motors (A. C. and D. C.)	4–6.6	5–8.3
Storage Batteries	5–6.6	6.6–10
Shop Equipment, Tools, etc	5–10	7.5–15

Small Tools

Small tools should be revalued periodically, thus fixing accurately the amount of depreciation. If this plan is followed for several years and a dependable rate is secured, it may be feasible to omit the revaluation for a year or two, applying the rate previously ascertained.

Furniture and Fixtures

Many concerns write down this item to $1. The practice is to be commended unless stockholders, partners, or other interested parties are being deceived. If, however, this asset is large, such a course may not be desirable; yet this item is usually overvalued so far as any actual realization of its book value is concerned.

Usually, in a going business, assets are not treated on the basis of realization values; but in the case of furniture and fixtures, so many changes are made to suit the convenience and whims of executives and clerks, and offices are moved so often from one place to another, that furniture and fixtures have a very indefinite value.

Office partitions are frequently built at the expense of tenants and are worthless at the end of the lease. In the meantime changes are often made. If the auditor is careful he may find duplications in the account.

If it is desirable to write off actual or realized depreciation only, 15 per cent per annum is a fair allowance on cost.

Landlord's Fixtures

As a general rule, the minimum rate of depreciation upon machinery and fittings erected upon leasehold property should be sufficient to wipe off the book value before the expiration of the lease.[13]

If machinery, etc., erected on leasehold property are not to become landlord's fixtures, a less rate may be applied, but in such case there should be a definite agreement as to what are and what are not to be the landlord's fixtures.

Horses

The depreciation of horses and other animals is rapid and inevitable. The rate may vary from 15 to 25 per cent of the cost. By means of revaluations, which can be more accurately made in case of horses than of most other assets, the actual rate of depreciation should soon be determined. These revaluations should be made fairly frequently.

Wagons, Automobiles, etc.

For wagons, from 8 to 10 per cent per annum is an ample allowance, provided that all repairs, renewals of parts, and maintenance are charged to operating expenses.

As with wagons, most parts of automobiles can be replaced. Under ordinary conditions the rate of depreciation on automobiles should be fixed at from 15 to 25 per cent per annum. The most expensive parts, such as tires, motors, and bodies, are easily replaced, and, if charged to operating, leave unprovided for only accrued depreciation and obsolescence.

The rate for taxicabs is stated in the American Institute Special Bulletin (September, 1921), to be 33⅓ per cent per annum.

[13] The question as to what are and are not landlord's fixtures is a complicated one which cannot be taken up here. The legal points arising in connection with them are considered in the various law texts which treat of the relations of landlord and tenant.

Ships

Although the depreciation of ships is invariably great and must be the subject of allowance, it is difficult to determine a fixed rate. The amount of depreciation should be certified by an engineer. Unless there is some reason for doubting the correctness of his report, the auditor is not responsible.

RULES OF UNITED STATES TREASURY DEPARTMENT.[14]—The Bureau of Internal Revenue of the Treasury Department has held that for income tax purposes 3 per cent is a reasonable allowance for depreciation of bulk freight steamships on the Great Lakes. However, if it can be shown that the fixed rate will not be sufficient to return all the capital invested by the time the vessel will be rendered useless, an addition to the regular rate to cover obsolescence may be allowed.[15]

Depreciation on steam schooners engaged in the coastwise lumber trade has been fixed for income tax purposes at 5 per cent.[16]

BRITISH PRACTICE.[17]—1. The normal rates of allowance for depreciation are as follows on the original cost price of the vessel *plus* subsequent capital expenditure: on steamers 4 per cent; on sailing vessels 3 per cent.

Exceptional cases are dealt with specially by the commissioners concerned.

2. Allowances are made year by year, until the total cost of the vessel, less the breaking up value (taken at the rate of 4 per cent in the case of steamers and 3 per cent in the case of sailing vessels), has been allowed.

3. The net expenditure on the renewal of engines and boilers

[14] For detailed discussion, see *Income Tax Procedure*, 1921, page 894.
[15] Committee on Appeals and Review Recommendation 27, Cumulative Bulletin Number 2, Income Tax Rulings, page 139.
[16] Committee on Appeals and Review Recommendation 279, Cumulative Bulletin Number 3, Income Tax Rulings, page 168.
[17] See Montgomery, *Income Tax Procedure*, 1920, page 733 *et seq.*, and Murray and Carter, *Income Tax Practice*, pages 252 *et seq.*, 593, 594.

and the net cost of any structural improvements, such as the lengthening or strengthening of a ship, is not allowed as a deduction for income tax purposes, but is added to the prime cost of the ship and depreciation allowed on the total amount.

4. Where a vessel changes hands, allowances for wear and tear are granted to the new owner not exceeding the actual cost to him of the vessel (less breaking up value).

The usual allowance for refrigerators or refrigerating machinery is understood to be 6½ per cent on the prime cost; for oil tank steamers 5 per cent on prime cost.

Patents

Although some value may attach to a patented article after the patent has expired, it is generally conceded that it is well to write off the entire cost of a patent during its legal life. The patent derives its value in great measure from the fact that it is a monopoly. The moment the monopoly ceases by the termination of patent rights, its value is seriously affected, if not entirely wiped out. If a patent has been leased, only the actual cost thereof in fees, etc., should be treated as an asset. To capitalize a patent lease at a greater sum is as incorrect as to capitalize good-will, although both are latent assets in every paying concern.

Copyrights should be treated similarly, due allowance being made for the fact that their commercial value generally expires long before the termination of the copyright.

The original life of a patent is seventeen years. Renewals are dependent upon the introduction of some essential novelty.

For purposes of the income tax a company is entitled to deduct as expenses the costs of litigation necessary to the defense of its title and interest in a patent.

Good-Will

Although good-will does not depreciate, it is constantly liable to fluctuations. Good-will is not usually written off, and formerly

the question of the amount at which it should stand in the balance sheet was not deemed to be within the scope of the auditor's work; but the present range of an auditor's duties compels him to give serious thought to this item. The valuation of good-will is fully discussed on pages 195–200. This discussion should be referred to if any question arises as to writing off all or any part of the book value of good-will.

For income tax purposes, obsolescence of good-will is not ordinarily applicable, but will be allowed in exceptional cases, as when a going business is discontinued because of the exhaustion of supply sources; providing, of course, that the cost of the good-will, or its fair market value as of March 1, 1913, if acquired prior thereto, can be definitely shown, and providing the period of obsolescence can be determined with reasonable accuracy.[18]

Wasting Assets

These will be considered under the following heads:

MINES.—The depreciation of mineral wealth through exhaustion resulting from exploitation is known as depletion. The value of the mine to the owner or lessee decreases during the year by exactly the amount of ore extracted. But on account of the uncertainty in the total amount of ore, its quality and grade, and the expense which may be involved in mining, it is difficult to fix upon a rate which will represent the average depletion during the life of the mine or the term of the lease, as the case may be. This can be done only by estimation, which is naturally inaccurate and may be misleading.

Under most state laws a mining company is not compelled to write off any depletion before declaring a dividend; but it is generally considered better finance to write off annually such proportion of the total cost of plant less its residual value as the yearly output bears to the estimated content of the mine, or, in case of a leased mine, such proportion of the total cost of the

[18] Cumulative Bulletin Number 2, page 141; O.D. 472.

lease as the yearly output bears to the output estimated for the duration of the lease.

On account of the great uncertainty of mining, and the fact that stockholders object to the accumulation of large reserve funds, which can earn only a low rate of interest and may just as well be distributed as dividends, it may be better policy to regard mines as temporary undertakings in which excesses of current revenue may be distributed without regard to the relationship existing between the value of the remaining assets and the amount of paid-up capital.

Timber Lands

Just as the removal of a ton of ore or coal reduces by so much the value of a mine, so the cutting of each thousand feet of timber reduces the value of the land on which it stood. It is obvious that there should be written off from year to year such proportion of the cost of the lands as the quantity of timber cut during the year bears to the quantity standing on the entire tract at the time of its purchase.

In some cases allowance for the value of the cut-over lands should be made in determining the amount which should be charged off for depletion of the timber. Very frequently, however, cut-over land has but little value.

Since it is easier to determine with certainty the total quantity of timber standing on a tract of land than it is to determine the contents of a mine, it follows that the depletion charge per thousand feet of timber cut can be more accurately fixed than can depletion charges in mining operations.

CHAPTER XXIX

INTEREST

The professional auditor should be thoroughly acquainted with the various methods of calculating interest. There is a remarkable lack of uniformity among business houses, and even banks, on the subject. The audit clerk who verifies interest collections or interest payments feels relieved if his own calculation agrees within a few dollars with the amount received or paid and lets it go at that.

Since the "few dollars" multiplied a number of times aggregates a considerable sum, it is important that the auditor familiarize himself with, and require his clerks to learn, the laws and customs governing interest, so that when a test is made it will be done intelligently, and if the amount received is insufficient or the amount paid is excessive, a report may be made thereon with confidence in the correctness of the criticism.

The three factors entering into the calculation of interest are principal, rate, and time.

Principal

Principal is the amount on which interest is to be calculated. There are two methods of reckoning principal. In bank discount the principal is regarded as the entire face of the note. For example, the bank discount on a note for $1,000 payable in one year at 6 per cent is $60, and the proceeds paid to the customer are $940. It will be noted that here the customer has the use of only $940 for one year, and yet he pays interest for the use of $1,000 for one year. The actual principal on which interest should be chargeable is only $940. The fictitious principal, on which interest actually is charged, is $1,000. The true principal in such case is found by the following proposition:

1.06 : 1.00 :: $1,000 : X
which gives a present value of $943.40 for X

In spite of the foregoing facts, it is now thoroughly well settled by universal usage that this system of bank discount will be permitted by the courts, even though it does actually effectuate usury.

The right is expressly given to national banks by United States Revised Statutes, Section 5197, now Section 5197 of the United States Compiled Statutes.

The right is also given to New York banks by Section 74 of the Banking Law of that state.

But the practice of anticipating the interest in this fashion has been held not to authorize the charging of interest on the anticipated interest in case such interest is not paid at the date of the execution of the note.

In the case of *First National Bank v. Davis*,[1] a note was given for $8,000 at one year at 10 per cent. It was renewed at maturity. The renewal note, instead of being for $8,800, was for $8,880, made up as follows: $8,000 principal, $800 anticipated interest, and, since the bank did not receive the $800 anticipated interest on the date of execution of the renewal, but merely took the debtor's promise to pay the $800 at one year, the bank added 10 per cent of this $800 (or $80) to the face of the renewal note, making it total $8,880, as stated. The court held this to be usury.

Interest in Arrears.—The question of principal also occurs when payments are made on an old account which is drawing interest. Under such circumstances the debtor sometimes claims that all payments should apply on account of principal; but unless there is a clear and specific agreement that they shall be so applied, the rule is well settled that such payments are applicable in the first instance to all arrears of interest before any application can be made on account of principal.

[1] 108 Ill. 633 (Sup. Ct. Ill., 1884).

COMPOUND INTEREST.—The question of principal is also involved in cases dealing with compound interest. It has been held that interest may be added to, and become a part of, principal at stated times and under certain conditions, and the question of whether or not this is permissible sometimes determines whether or not the transaction is usurious or otherwise. This is a point upon which an auditor is frequently required to pass.

Loan accounts and book accounts between interrelated enterprises sometimes run along for years without a final settlement. When a statement is desired upon which a settlement may be based, there is always a temptation to state the transactions in as short rests or periods as possible, the interest being calculated and included in each balance carried forward. This results in compounding the interest, is illegal, and should never be permitted by the auditor.

It may be a hardship to the lender, because compound interest would be legal and proper in such a case if the accounts had been written up properly at the time, interest actually entered in the books, and statements prepared therefrom and submitted to the borrower or debtor. If not objected to at the time or within a reasonable time thereafter, the transaction has the legal effect of an account stated, and each new starting balance, although including interest calculated at shorter intervals than a year, being acquiesced in, is binding.

In the absence of special custom or agreement, however, interest should not be compounded.

Rate of Interest

This rarely or never admits of dispute except in those cases where a note, contract, bond, or other obligation is made in one jurisdiction, to be paid or performed in another jurisdiction without specifying the rate of interest, and the legal rate of interest in the two jurisdictions is different. Then the question sometimes arises whether the rate at the place of making the note or the rate at the place of payment is to govern.

A similar question arises when one rate of interest is the legal rate at the time of making the note, contract, or bond, and another legal rate is in force when the obligation falls due.

In the absence of an intention to the contrary shown by express stipulation or otherwise, the rate of interest is to be regulated by the law as it existed at the time and place of making the contract, and not by the law existing when the debt falls due or when the remedy is sought.[2]

It is well settled, however, that the parties may contract for the legal rate in either place and the contract will govern.

Time

The time for which interest is to run gives rise to a wide diversity of practice.

There is an underlying principle which is of very general, although not absolutely universal, application, and it is this, that if the first day of the interest period is included in the computation, then the last day shall be excluded; and if the first day is excluded, then the last day is included. The parties can, if they will, contract otherwise.[3]

Custom in Banks and Trust Companies.—In Kirkbride, Sterrett, and Willis' *The Modern Trust Company*,[4] the rule is stated to be: "In computing interest on loans, the actual number of days is taken. If the day on which the loan was made is included, the day of payment is not counted."

It is more or less common, however, for banks to count both the first and last days when the interest is *payable to themselves*. This custom will not override the common law rule unless the parties expressly agree to it. The bank that figures time thus at the full legal rate of interest in the state of Vermont is guilty of

---

[2] 8 Cyc. 310.
[3] See *Blanchard v. Hilliard*, 11 Mass. 85.
[4] Fifth edition, page 125.

usury, but not *corrupt* usury.[5] The bank that does this same thing in the state of Virginia is not guilty of usury at all.[6]

In the Crump case, last cited, the court even held that it was proper for the bank to charge interest not only on the first and last day of the original note, but also on the first and last day of successive renewal notes, the result being that the bank received double interest on every day that a renewal was executed. Many banks follow that custom, although some banks are content with charging the first and last day on the original note, and not on the renewal note.

The legal fiction of the common law was that a day is indivisible, and therefore even if a customer receives his discount money just before closing on the date of his note, and pays it immediately after opening on the date of maturity, he still, in strict contemplation of law, has had the use of that money all of both the terminal days, and on that fiction the decision in the Crump case was undoubtedly sound law. Whether it was equitable or not is another question.

When Interest Is Paid.—Where banks, however, have to *pay interest*, instead of receive it, they apply a widely different rule.

1. Quite generally they credit interest on deposits only the day after deposit, on the theory that most deposits are made by cheque and it takes one day on an average to collect through the clearing house.

2. Some banks provide that deposits made between the second and the fifteenth of the month shall draw interest from the fifteenth; and that deposits made between the sixteenth and the first of the following month shall draw interest from the latter date.

Assuming a uniform volume of deposits for each day of the month, this arrangement is advantageous to the bank as against its depositors in the ratio of 2 to 1.

---

[5] *Bank of Burlington v. Durkee*, 1 Vt. 399.
[6] *Crump v. Trytille*, 5 Leigh 251 (Court of Appeals of Virginia, 1834)

3. Savings banks quite generally provide that deposits made between the first and fifth day of the month shall draw interest from the first, while deposits made after the fifth shall draw interest from the first day of the following month.

Assuming a uniform volume of deposits for each day of the month, this arrangement is to the advantage of the bank as against its depositors in the ratio of 5 to 1.

4. Some banks allow interest on savings accounts only by full calendar months.

5. Some banks provide that if the depositor makes a withdrawal during any semiannual interest period, he thereby loses all interest which may have accrued thereon since the last interest date.

This rule works largely to the profit of the banks and to the loss of the depositors.

Ignorance of Customers.—As to how far an auditor may wish to criticize these rules is a question for individual determination. The fact is, however, that most business men know nothing about the customs with respect to interest. They can negotiate for a low rate of interest on loans or a high rate on deposits, but they do not know that their bank may have established arbitrary interest rules which yield them a greater profit than other banks exact. It may therefore be proper for the auditor to examine into the whole matter and report thereon to the client.

Custom Among Business Houses.—Business and commercial houses as a rule count only the first or last day, but not both, when they figure interest.

Custom Among Stock-Brokers.—Stock-brokers settle purchases the day following the sale, and they debit the customer's account on the day of settlement. In charging monthly interest to the customer, the broker includes both the day of settlement and the last day of the month. The broker justifies this by showing that he, in turn, is compelled to pay interest on his loan

to the bank in like manner by including both the terminal days of the period in his calculation.

The stock-broker, by rendering accounts monthly and calculating interest for the same period, compounds the interest monthly.

New York Clearing House.—In its official announcements, the New York Clearing House includes the first day and excludes the last day.

New York Stock Exchange Practice.—The New York Stock Exchange regulations require that:

Interest on bonds shall be computed for the number of months and days elapsed from the last previous coupon date to date of delivery, but not including both the coupon date and the date of delivery. The computation shall be based on a table counting three hundred and sixty (360) days to the year.

Every calendar month is 1/12 of 360 days—30 days.

Every period from a date in one month to the same date in the following month is 30 days.

To all bond quotations add accrued interest, excepting bonds in default and income bonds, both of these classes of bonds being sold "flat."

In settlement of contracts in interest-paying bonds the "interest" shall be computed to the day of maturity of contract on regular sales or on sales at three days, at the rate specified in the bond; and on time option contracts, interest specified in the bond shall be computed to include the day of sale, and thereafter at the rate of interest agreed upon.

Registered bonds will not sell ex-interest on the day the books close for payment of interest. In settlement of contracts in interest-paying registered bonds, interest must be added to the date of the maturity of contract, and a due bill, signed by the party in whose name the bond stands for the full amount of the interest to be paid by the company, must accompany the bond until interest is paid; the due bill issued by a non-member must be paid when due by the Exchange member or firm guaranteeing it.

The Treasury Department of the United States.—In the Treasury Department it is provided that: "Only one of the

two days of date and due date of an obligation is taken into account in stating the time for which interest is to be calculated."

The Unit Period

Interest, either expressly or impliedly, is at such a rate "per annum."

Where the interest runs for one month, quarterly, or semi-annually, the proportion is one-twelfth, one-fourth, or one-half of a year.

A month is held to be one-twelfth of the year, no matter whether the month have twenty-eight, twenty-nine, thirty, or thirty-one days.

Both of the foregoing rules are in force universally and are sanctioned by the rules of the United States Treasury Department.

Where the interest runs, however, for so many days, there is a sharp diversity of opinion as to whether a calendar year of 365 days (366 days for a leap year) or an artificial year of 360 days is the proper unit of calculation.

The New York Clearing House calculates interest on the basis of 360 days to a year. For instance, the interest on $1,000 from January 1, 1912, to March 12, 1912, at 4 per cent per annum was officially calculated as $7.89. This represented 71 days on a 360-day-to-the-year basis.

It has also been held by the courts that the artificial year of 360 days is a proper basis.[7]

But the better rule, at least in modern times, would seem to be that the calendar year of 365 days is the proper basis.

N. Y. Firemen Ins. Co. v. Ely[8] held that taking interest on the basis of 360 days to the year was usury.

Chapter 148 of the Acts of Massachusetts of 1909, approved March 6, 1909, entitled "An Act Relative to the Computation of

---

[7] *State Bank of North Carolina v. Cowan*, 8 Leigh 238 (Court of Appeals of Virginia, 1837).

[8] 2 Cowen 678 (Supreme Court of New York, 1824).

Interest on Bonds and Notes in Dealings with the Commonwealth," makes the year of 365 days the standard for all loans to or by the commonwealth.

NEW YORK LAW.—After many vicissitudes, the state of New York now has in force the following:[9]

> The term year in a statute, contract, or any public or private instrument, means 365 days, but the added day of a leap year and the day immediately preceding shall for the purpose of such computation, be counted as one day . . . the term year means twelve months, the term half year, six months, and the term quarter of a year, three months.

RULES OF U. S. TREASURY.—The rules of the Treasury Department of the United States government are as follows:

> In calculating interest for a fractional period, the time is the true fraction of that period. For an annual rate, the time is the exact number of days for which the interest runs divided by the number of days in the year, 365 or 366; for a semiannual or quarterly period, it is the number of days for which the interest runs divided by the number of days in the particular half year or quarter year.
>
> Unless the unit period is a month, the month does not enter into interest computations, only days and the full unit period being considered.

BONDS AND MORTGAGES.—The rule just enunciated is somewhat at variance with the rule generally obtaining on bonds or mortgages on which the interest accrues regularly, as for example, quarterly or semiannually. There, when interest is computed for a part of such quarterly or semiannual period, it is the usual custom to state the time in months and days rather than entirely in days. In such a calculation the number of full months from the initial date to the same numbered day of the month next preceding the final date should first be ascertained, and then the odd days to the final date.

When we figure these odd days, there are three ways of making the computation.

---

[9] Sec. 58 of the General Construction Law of New York.

1. They may be taken at so many thirtieths of a month (on the 360-day basis).
2. They may be taken as so many twenty-eighths, twenty-ninths, thirtieths, or thirty-firsts, according to the month in which they fall.
3. They may be taken as so many three hundred and sixty-fifths of a year.

It is not assumed by any means that the foregoing discussion covers the question of interest at all exhaustively, but the author hopes that the customs and decisions reviewed will enable a student or practitioner to substantiate any criticisms which he may deem proper to make during the progress of an audit.

CHAPTER XXX

THE LIABILITIES OF DIRECTORS

It may be thought that the duties and responsibilities of an auditor are onerous enough without injecting into a treatise of this nature an intimation that a professional auditor is charged with looking after the directors of a corporation as well as its officers and clerks.

Such is rarely the case, however, because most of the directors in the United States who direct and who perform acts which require review, are officers as well, and the auditor examines their transactions as such and not in their capacity as directors.

Board Minutes' Inspection

Nevertheless, the auditor may find, in reading the minutes of the proceedings of the board of directors or of an executive or other committee, that one or more directors have been intrusted with negotiations to purchase property or with similar commissions. In such cases the auditor should verify the transaction along the usual lines.

Directors' Dealings with Company

If a director receives no compensation, except perhaps a small attendance fee, the warning as to participation in meetings is not so pertinent, but it frequently happens that directors are interested in contracts and other transactions which are authorized or arranged at meetings in which they participate.

If the auditor discovers this state of affairs and is convinced of the bona fides of the transactions, he need not criticize, but he can point out the divergence from the law, state the proper procedure, and suggest that at the next meeting of stockholders all such questionable acts of the directors be ratified.

Under ordinary circumstances a director is held responsible for good faith only, but if the minutes are not full and clear and at some distant day a dissatisfied stockholder or creditor looks sharply for unlawful and unauthorized transactions, the director may find himself involved in annoying, if not expensive, litigation.

In one case the directors in the name of the corporation published a libel on one of their number, the treasurer (Hill). The latter sued the corporation and recovered a substantial sum. He sued the directors individually and recovered damages from them. Then the corporation sued the directors due to losses it suffered through the misconduct of the defendants. The court ruled that the directors were liable.[1]

Personal Liability of Directors

Section 16 of the Illinois Corporation Act provides:

> If the indebtedness of any stock corporation shall exceed the amount of its capital stock, the directors and officers of such corporation, assenting thereto, shall be personally and individually liable for such excess, to the creditors of such corporation.

Under this law a case arose in which a creditor agreed not to hold the directors personally liable for notes he had accepted from the corporation. The directors were considered personally liable even though as directors they did not sign the notes which had created a debt in excess of amount of the capital stock of the corporation.[2]

The court held when the directors authorized debts in excess of the capital stock, they became sureties for the excess, regardless of whether they signed the notes or not.

Compensation of Directors

Directors usually receive an attendance fee ranging from $5 to $50, and so long as there is nothing in the by-laws to prevent, the auditor can accept as authority therefor a resolution which

---

[1] *Hill et al. v. Murphy et al.*, 98 N.E. (Mass.) 781.
[2] *Slater v. Taylor*, 146 Ill. App. 97.

has been regularly adopted. The minutes should record the names of all directors present at each meeting, which serves as a check on the amount disbursed for this purpose. Compensation in excess of the attendance fee is rarely paid to a director who is not an officer.

If any sum is voted to one or more directors, the auditor should ascertain whether the by-laws permit the payment, and whether the action was taken at a full board meeting or whether any were absent who might have objected. If any director who is benefited votes for the resolution, or if his presence is necessary to make a quorum, the action is voidable and may be attacked. All such transactions should be reported to and ratified by the annual meeting of stockholders. If no such action has been taken by the stockholders, the auditor should mention the fact in his report.

It has been held by the courts that officers are not entitled to compensation simply because they occupy office and perform the duties incident thereto. Their salaries should be fixed before election as directors, if possible. If this is not feasible, the amounts paid to the directors in compensation for their services should be reported to the annual meeting and be formally approved by the stockholders.

As a practical matter, where the officers and directors own all or nearly all of the stock and are acting in good faith, it is not necessary to report salaries or other matters of detail to the stockholders' meeting.

Directors May Inspect Books

It is not generally known that a director has an absolute right to inspect the books and papers of a corporation of which he is a director. There are a great many men who represent minority interests on a board and who are almost totally ignored in the management of the company. Information with respect to finances or earnings is rarely furnished to them, and is then handed out as if there were no obligation to do so.

Auditors are frequently consulted by directors who state that they have tried to secure information without success. The auditor should advise them that their legal right to full access to the books is unquestioned, and that they may be accompanied by a professional auditor if they require assistance. Directors are charged with a knowledge of what is going on, and if they fail to keep informed, they may be held jointly responsible for the acts of others. In all cases, therefore, in which they have any doubt as to what is going on, it is nothing more than simple business prudence to employ an auditor who will ascertain exact conditions.

Unless there is a specific inhibition which the auditor on moral or legal grounds believes to be binding upon him, he should so far as possible, report to members of the board of directors individually, and it is not improper for him so to word his report as to invite personal conferences with any or all of them.

A director has a right to inspect *all* of the books and papers of a company. This includes the auditor's report, and if an auditor has reason to believe that any director does not receive his report, he should investigate and at least ascertain whether the director is knowingly ignorant or whether he is kept in ignorance of the existence of the auditor's report because the officers or his colleagues have something to conceal. Many directors do not know that under certain conditions they are personally liable for all debts in excess of a certain amount. The auditor should post himself on this and other points so as to be able to make helpful suggestions.

Rulings Cited.—The directors' right to examine the books of a corporation and the extent to which he may be assisted by public accountants, is brought out in quotations from the rulings which follow:

A director of a domestic corporation doing business in the city of New York is entitled, as a matter of law, to a peremptory writ of mandamus requiring the president and treasurer of such corporation to exhibit to him

the books and papers of the corporation for examination by himself, alone or with the aid of a competent and proper person employed by him and approved by the court.

An order granting such an application which allows the director, his attorney, accountant and assistants, without limitation in number, to examine the books, and permits the examination to range over a period of three months, is too broad in its scope, where it does not appear that more than one accountant will be required or that the examination will take three months.

Such an order should be modified by allowing the examination and the inspection to be made by the director and one accountant, and the period within which the examination should be made should be limited to four weeks with a provision allowing an application to the court for an extension of the time in case of necessity.[3]

. . . the right of a director to such inspection is absolute, being necessary to enable him to perform the duties of his office. To enable a director to secure such inspection he need only show that he is a director and has demanded permission to examine the books and has been refused.[4]

DIRECTORS CANNOT CONFER UNLIMITED RIGHTS UPON AUDITORS.—Although the director's right to examine the books of the corporation is absolute, he cannot confer unlimited rights of inspection upon auditors.

Although a director of a corporation may be aided by an accountant or an attorney in making an inspection and examination of the corporate books, where its accounts are intricate and complicated, he cannot entirely delegate this duty to professional accountants.

Hence, the mere fact that a corporation has closed its town office and removed its books to another office about twenty miles distant, does not authorize a director to delegate his official right and duty, as such, to an audit company, and to subject the corporate books to an unlimited examination by such company's employees.[5]

DIRECTOR'S DUTY TO INSPECT BOOKS.—Not only does the director have the right to inspect the books of the corporation;

[3] *People ex rel. McInnes v. Columbia Bag Co.*, 103 App. Div. 208 (April, 1905).

[4] *People ex rel. Leach v. Central Fish Co.*, 117 App. Div. 77 (January 11, 1907).

[5] *People ex rel. Bartels v. Borgstede, as President of the Ferncliff Cemetery Assn., etc*, 169 App. Div. 421 (October 22, 1915).

it is his duty to do so, because he cannot otherwise act intelligently in determining the financial policy of the corporation. The law of New York State provides that the directors of a stock corporation shall not declare dividends except from "surplus profits arising from the business of such corporation," also that they shall not in any way pay to stockholders "any part of the capital of such corporation" except as authorized by law. If a director wishes to act intelligently regarding such problems as these, he will regard inspection of the books of his corporation as a duty as well as a right.

Legal Liabilities of Directors

It is unquestionably the duty of a professional auditor to warn the directors against the payment of unearned dividends. If it appears that his suggestion is unheeded it may be that he has fully discharged his duty, but in view of possible subsequent developments the auditor should seek legal advice in order to be sure that his own position is unassailable. The report and certificate will, of course, set forth his position fully.

Successful business men might look with more favor upon directorships if they were sure that affairs of the corporation would have the periodical supervision of auditors who seek to broaden, rather than to narrow, their responsibilities.

American Malting Case.—The auditor's consideration of the possible legal liabilities of directors need not extend beyond matters connected with the accounts, but, wherever accounting questions are involved, the auditor's familiarity therewith should be unquestioned. In the American Malting case,[6] decided in New York in 1904, the court discussed the relation and duties of directors to the accounts. The decision is of sufficient interest to warrant its reproduction in full:

[6] 92 N.Y.S. 70; 45 Misc. Rep. 484.

ARCHIBALD A. HUTCHINSON AND VICTOR K. MCELHENY, JR., on Behalf of Themselves and All Other Stockholders of the American Malting Co., Similarly Situated,

Plaintiffs,

v.

ALEXANDER M. CURTISS and THE AMERICAN MALTING CO.,

Defendants.

(SUPREME COURT, NEW YORK SPECIAL TERM, DECEMBER, 1904.)

The statutes of this State allow the recovery, from directors of a foreign corporation, of dividends unauthorized by the laws under which such corporation is organized. It is the foreign statute that makes the dividends unauthorized but the recovery is to be had under the New York statute.

No dividends can be made except from "surplus or net profits."

Contracts, entered into by a corporation, for future deliveries of a product not yet made by it, from raw material not yet purchased, cannot be taken as assets in figuring said surplus or net profits. Dividends cannot be made on a mere hope or expectation of profits.

Where raw material is bought by weight and after manufacture is increased in weight and value, the corporation is entitled to treat it as an asset at its increased value.

A director, who is not present when an unauthorized dividend is declared, is not liable under the statute, even though he is present at a subsequent meeting when the minutes of the former meeting are ratified.

A director, sued for unauthorized dividends, cannot be credited with the profits which subsequently accrued under a change of management.

A director is not liable for commissions, paid on the sale of bonds of a corporation which had made unauthorized dividends, in the absence of proof of fraud and conspiracy for the defendant's personal benefit; such loss is included in the loss caused by the illegal dividends which defendant must pay.

Action against director for making unauthorized dividends.

CLARKE J.:

The American Malting Company was organized under the laws of New Jersey, September 28, 1897. It began business on October 11, 1897. On October 15, 1897, it filed a copy of its charter in the office of the Secretary of State of New York to enable it to do business in this State and received the usual certificate for that purpose. The principal office of the

company was situated in the city of New York, at No. 80 Broadway, from its organization until the fall of 1899, and since then it has been situated continuously at East River and Sixty-third Street, New York City. The company has had no plant or property in New Jersey. It has kept no bank account there. It had merely a formal, statutory office in that State. Its capital stock is $30,000,000, divided into 300,000 shares of $100 each, of which 144,400 shares of preferred stock and 145,000 shares of common stock have been issued. The preferred stock is seven per cent cumulative, having a preference as to dividends only. The company is engaged in the manufacture and sale of malt. Its stock was issued to promoters for twenty-one malting establishments, situated in various parts of the United States, on which they had acquired options, and for $2,080,000 cash working capital. No stock in trade was, however, acquired by the issue of stock. As soon as the organization was effected the company was compelled to purchase from the vendors of the various malting plants their stocks of barley and malt, for which the company issued its obligations, amounting to upward of $1,600,000. A little over two months after the company began business, and on December 20, 1897, the board of directors declared a dividend of one and three-fourths per cent to preferred stockholders, payable January 15, 1898. This amounted to $219,450. Thereafter a dividend at the same rate was declared and made payable at each of the following dates: April 15, 1898, $219,450; July 15, 1898, $219,450; October 15, 1898, $219,450; January 15, 1899, $219,450; April 15, 1899, $252,700; July 15, 1899, $252,700; October 15, 1899, $252,700. In all $1,855,350. Barely two weeks after the payment of the dividend of October 15, 1899, and on November 2, 1899, the minutes of the board of directors disclosed its serious financial condition as reported to said board, viz., its outstanding obligations amounted to $2,800,000 in notes; that the officers were unable to negotiate further temporary loans; that the company needed additional working capital, and that the board authorized the sale of $4,000,000 mortgage bonds of the company. Said bonds, six per cent fifteen-year gold mortgage bonds, were subsequently disposed of at a discount of $400,000. This is an action brought by plaintiffs as stockholders on behalf of themselves and all other stockholders similarly situated against the defendant Curtiss as director of the company to compel him to account for and pay to the company the amount of the dividends declared and paid as not having been paid out of the profits, but out of the capital. The board of directors having upon demand refused or neglected to bring suit in the name of the company, it was joined as a party defendant. At first the company put in a defense, but subsequently, its management having changed, it obtained leave to file an amended answer admitting the

allegations of the complaint and joining in the prayer of the plaintiffs for the relief demanded. In a similar action against another of the directors the complaint was dismissed upon the trial. Upon appeal the Appellate Division reversed that judgment. *Hutchinson v. Stadler*, 85 App. Div. 428. That case settled the law for this court to this extent; that an action could be maintained in the courts of this State against a director of a New Jersey corporation to recover the amount of dividends declared in violation of the laws of that State. Two opinions were handed down, in which the learned justices arrived at the conclusion that the action could be maintained upon different grounds. With each of these opinions a justice concurred. The fifth learned justice concurred in the result. I cite this division of opinion because this court is now called upon to apply the law, as laid down with this practical embarrassment, that while it was the unanimous decision that the action could be maintained, yet the difference in the grounds therefor means a difference of hundreds of thousands of dollars in the judgment I am about to order. As I interpret it that case holds this court has jurisdiction, because section twenty-three of the Stock Corporation Law of this State provides: "The directors of a stock corporation shall not make dividends, except from the surplus profits arising from the business of such corporation; nor divide, withdraw or in any way pay to the stockholders, or any of them, any part of the capital of such corporation, or reduce its capital stock, except as authorized by law. In case of any violation of the provisions of this section, the directors under whose administration the same may have happened, except those who may have caused their dissent therefrom to be entered at large upon the minutes of such directors at the time, or were not present when the same happened, shall jointly and severally be liable to such corporation and to the creditors thereof to the full amount of the capital of such corporation so divided, withdrawn, paid out, or reduced;" and because section thirty of the General Corporation Law of New Jersey provides: "No corporation shall make dividends, except from the surplus or net profits arising from its business, nor divide, withdraw, or in any way pay to the stockholders, or any of them, any part of its capital stock, or reduce its capital stock, except according to this act, and in case of any violation of the provisions of this section the directors under whose administration the same may happen shall be jointly and severally liable at any time within six years after paying such dividends to the corporation and to its creditors in the event of its dissolution or insolvency to the full amount of the dividend made or capital stock so divided, withdrawn, paid out, or reduced, with interest on the same from the time such liability accrued; provided that any director who may have been absent when the same was done, or who may have dis-

sented from the act or resolution by which the same was done, may exonerate himself from such liability by causing his dissent to be entered at large on the minutes of the directors at the time the same was done, or forthwith after he shall have notice of the same, and by causing a true copy of said dissent to be published within two weeks after the same shall have been so entered in a newspaper published in the county where the corporation has its principal office;" and because section sixty of the Stock Corporation Law of this State provides: "Except as otherwise provided in this chapter the officers, directors and stockholders of a foreign stock corporation transacting business in this state, except moneyed and railroad corporations, shall be liable under the provisions of this chapter, in the same manner and to the same extent as the officers, directors and stockholders of a domestic corporation for: 1st. The making of unauthorized dividends . . . Such liabilities may be enforced in the courts of this state in the same manner as similar liabilities imposed by law upon the officers, directors and stockholders of domestic corporations." That is, by virtue of the statutes, this State allows the recovery of dividends unauthorized by the State of New Jersey from directors of a New Jersey corporation in the same manner and to the same extent as the directors of a domestic corporation. That is, it is the New Jersey statute which makes the dividend unauthorized, but the recovery is to be had according to the New York statute. What, then, is unauthorized? "No corporation shall make dividends except from the surplus or net profits arising from its business." Net profits are defined in the Century Dictionary as "what remains as the clear gain of any business after deducting the capital invested in the business, the expenses incurred in its management, and the losses sustained by its operation." And the controlling question of fact is, were these dividends paid from "net profits"?

The twenty-one branches, located in many places and in different States, which were actually engaged in the business of manufacturing the malt from the barley, sent in to the general office in New York daily, weekly and monthly statements in great detail of their business. From these statements branch books were made and from these a general set of books was prepared. All of the books and papers from the general office, which were used in the accounting department, were produced in court, identified and marked in evidence. The defendant objects to the summaries made up from these books, and from any and all conclusions of fact to be drawn from said books and said summaries upon the ground that concededly the contracts and the contract books were not produced and were not considered. It was in evidence that malt was always oversold, that contracts for future deliveries, running over many months, were

entered into, and the claim is that such contracts were required to be taken into consideration when it came to be determined whether any particular dividend was warranted or not. Such claim, in my opinion, is unfounded. The law is that "No corporation shall make dividends except from the surplus or net profits." These contracts were to deliver at a future time a product not yet made from raw material, not yet purchased, with the aid of labor not yet expended. The price agreed to be paid at that future time had to cover all the possible contingencies of the market in the meanwhile, and might show a profit, and ran the chance of showing a loss. When the sales actually took place they were entered in the books. But to calculate months in advance on the result of the future transactions, and on such calculations to declare dividends, was to base such dividends on paper profits—hoped for profits, future profits—and not upon the surplus or net profits required by law. It does not seem to me that you can "divide," that is, make a dividend of a hope based on an expectation of a future delivery at a favorable price of what is not yet in existence, under the statute. So the objection to the books upon that ground is of no weight. From the books certain statements were made up for the aid of the court upon different theories and in different ways. One set of statements was testified to be exactly what the books showed, without the change of a figure. These exhibits are known as 10 P, 10 Q. As to these statements I do not understand that there is any controversy as to the accuracy of the figures. A second statement, known as 10 R, 10 S, is identical with the foregoing, with the elimination of one entry, which, as a matter of fact, was eliminated by the company itself some months after its entry. There was entered on the books on the 31st of December, 1898, an item of $388,063.36 of the anticipated or estimated future profits on contracts for future deliveries running over many months. This entry, for the reasons stated in regard to the contracts for future deliveries, was unjustifiable. The company subsequently removed this entry. The actual transactions, that is, the deliveries of the malt called for by the contracts and the receipts in payment therefor being reported from time to time as they occurred, resulting in double credits, the cancellation or reversal of the entry was absolutely required. On the other hand, I find against the plaintiffs in regard to their contention as to the increase account. Barley is bought by the bushel of forty-eight pounds. Malt, the manufactured article made from barley by steeping, is dealt in by the bushel of thirty-four pounds. The process of manufacture produces about fifteen per cent more of malt by the bushel than the barley measures from which it is produced. The amount of this fifteen per cent excess is reported from each of the manufactories month by month as increase. Of course, this increase has a value, as it is sold as

malt at malt prices. For the purpose of inventory the company has ascribed to it the value of the barley. This, plaintiffs claim, is error, because that amount has already once been charged to malt account, and they say this increase should have no value ascribed to it until sold and delivered, when its proceeds go into the books as cash. But it certainly is an asset of the company, and as an asset at inventory periods, or when it is necessary to ascertain the actual condition of the company, it must be valued in some way. As it has always been the custom in the malting business to treat it as treated by this company, I am unwilling to disregard that custom. The accounts upon which I based my conclusions treated it as the company did. I find that at the time of the declaration and payment of the third dividend, July, 1898, a deficit was caused thereby of $142,774.59, and from that time to the end of the period under consideration none of the dividends were paid out of net profits, but all were paid out of capital. But it appears that defendant, Curtiss, was not present at the meeting on February 28, 1899, when the dividend paid April 15, 1899, was authorized. Under the New York statute—under which we are proceeding—a director who was not present when the dividend was declared is not liable. The approval of the minutes at the following June meeting, at which he was present, was only the authentication of the proof of what had happened at the previous meeting. He is, therefore, not to be held liable for that dividend. He is liable, in my judgment, as follows: For dividends paid July 15, 1898, to the extent of $142,774.59; October 15, 1898, $219,450; January 15, 1899, $219,450; July 15, 1899, $252,700; October 15, 1899, $252,700—$1,087,074.59, with interest thereon from the several dates of payment. As the highest court of New Jersey, interpreting the law of the State under which this company was incorporated, held, "for the full protection of the company the liability of the directors must be absolute" (*Appleton v. Am. Malting Co.*) I find against the defendant upon his claim that the accrued profits of the company, made under a changed management, can be credited in his favor against his liability. It is claimed that this is a harsh law. If it were such complaint should be made to the Legislature and not to the court. It does not seem to me that in these days of great corporations and of combinations into one of many corporations it is asking too much of directors, fiduciary officers as they are, that they should obey the law of their incorporation and not bring their companies to the verge of bankruptcy and ruin by the payment of quarterly dividends on preferred stock out of capital instead of net earnings. As to the second cause of action: While the allegations are profuse as to a "willful, fraudulent, and illegal conspiracy," the proof failed to establish that there was any such conspiracy for defendant's

personal benefit. The cases establishing the cause of action pointed at in these allegations have been where directors have diverted to themselves for their own benefit the property of the company. The damage here flowed out of the making of the dividends, if any there was. It was alleged that the company had to issue bonds, and that the commissions, discounts, and interest thereon amount to $650,000, which, as a waste of its funds, the plaintiff seeks to recover. But as I find that this flowed as a damage only from the declaration and payment of the dividends, I am persuaded by the language of Mr. Justice Hatch in *Hutchinson v. Stadler, supra*, that it does not under the facts of this case constitute a separate cause of action. He says: "In point of fact the statute of the State of New Jersey upon this subject, as well as our own, does little more than lay down a rule of damage to be enforced against directors for breach of duty. At common law a recovery could be had for the waste, but the extent of the recovery would depend upon the damage sustained by the corporation and be the subject of proof. The statute measures the loss sustained, which is usually the correct amount, and authorizes a recovery therefor of the individuals who produced that result." It seems to me that any other theory would result in turning the amount recovered for illegal dividends into a penalty. The Court of Errors and Appeals of New Jersey in this very matter, as well as our Appellate Division, have held: "The liability imposed by the statute is not penal in its character. Its sole purpose is not to punish, but to provide for the making of compensation by wrongdoers for the injury sustained by their wrongful act." This alleged loss must, therefore, be held to have been included in that for which the defendant is required to make compensation by paying into the company an amount equal to the illegal dividends.

APPENDIX A

UNIFORM ACCOUNTING

A Tentative Proposal Submitted by the Federal Reserve Board, Washington, for the Consideration of Banks, Bankers, and Banking Associations; of Manufacturers, Auditors, Accountants, and Associations of Accountants

(Reprinted from the *Federal Reserve Bulletin*, April 1917)

Introduction

Through the courtesy of the Federal Trade Commission the Federal Reserve Board has been enabled to take advantage of a large amount of information and data which the Trade Commission acquired in connection with the study of the statements made by merchants, manufacturers, etc., as showing the condition of their business. Because this matter was clearly of importance to banks and bankers, and especially to the Federal Reserve Banks which might be asked to rediscount commercial paper based on borrowers' statements, the Federal Reserve Board has taken an active interest in the consideration of the suggestions which have developed as a result of the Trade Commission's investigation, and now submits in the form of a tentative statement certain proposals in regard to suggested standard forms of statements for merchants and manufacturers

The problem naturally subdivides itself into two parts:

(1) The improvement in standardization of the forms of statements.

(2) The adoption of methods which will insure greater care in compiling the statements and the proper verification thereof.

In recent years bankers, through their associations and otherwise, have made rapid progress in the direction of more uniform and complete forms of statements. Much has also been accomplished in the improvement of the quality of the statements rendered and in securing statements which do not depend for their accuracy on the borrower's statement alone but are verified to a greater or less extent by independent scrutiny and audit. The advantage of a statement certified by trustworthy public accountants over an unverified statement is evident. At the present time, however,

there is no uniformity as to the extent of verification in the case of statements put forward as having been verified.

The Federal Trade Commission in the course of its investigation of business conditions has been strongly impressed with the lack of uniformity and has enlisted the aid of the American Institute of Accountants, with a view to remedying the condition. It has found that verified statements may be divided broadly into——

(*a*) Those in which the certificate is based on an examination of the books without personal supervision of inventories and independent appraisal of all assets with the aid of technical appraisers; and

(*b*) Statements verified with the personal supervision of inventories and independent appraisal of all assets.

The value of the two classes of audits and their relation to each other depends to a great extent upon the character and magnitude of the business involved.

In some cases method (*b*) has advantages over method (*a*). In other cases, notably those of large companies in which personal supervision of inventories is arduous and perhaps impracticable and the value of an independent appraisal of assets is liable to be considerably exaggerated, the reverse may be true. That is to say, a verification based upon the books themselves without an appraisal may be and often is the safer method of procedure. It is highly desirable gradually to educate the business world to the great importance of a complete form of audit statement, although any plan for immediate adoption intended to produce practical results must recognize that under present practice probably more than 90 per cent of the statements certified by public accountants are what are called balance-sheet audits, such as are described in paragraph (*a*) above referred to.

As a first step toward the standardization of balance-sheet audits and to insure greater care in compiling and verifying statements the Federal Trade Commission requested the American Institute of Accountants to prepare a memorandum on balance-sheet audits. This memorandum was duly prepared and approved by the council of the institute representing accountants in all sections of the country.

After approval by the Federal Trade Commission the memorandum was placed before the Federal Reserve Board for consideration. The Federal Reserve Board, after conferences with representatives of the Federal Trade Commission and the American Institute of Accountants, and a careful consideration of the memorandum in question, has accepted the memorandum, given it a provisional or tentative indorsement, and submitted it to the banks, bankers, and banking associations throughout the country for their consideration and criticism.

The recommendations in the memorandum apply primarily to what are known as balance-sheet audits. This is an initial step which may easily be succeeded by future developments tending still further to establish uniformity and covering more fully the field of financial statements.

General Instructions for a Balance-sheet Audit of a Manufacturing or a Merchandising Concern

The scope of a balance-sheet audit for a fiscal year or other operating period of an industrial or mercantile corporation or firm comprises a verification of the assets and liabilities, a general examination of the profit and loss account, and, incidental thereto. an examination of the essential features of the accounting.

Trial balances of the general ledger, both at the beginning and end of the period under review, should be prepared in comparative form and checked with the ledger. The items in the trial balances should be traced into the balance sheets before the assets and liabilities are verified, to prove, among other things, that no "contra" asset or liability has been omitted from the accounts, that the assets and liabilities have been grouped in the same manner at the beginning and at the end of the period, and also that the balance sheets are in accordance with the books. The disposition of any general ledger assets and liabilities that may have been scrapped, sold, written off, or liquidated during the period under review should be traced and noted in the working papers. Furthermore, a general scrutiny of the general ledger should be made to see that the accounts, if any, that have been opened and closed during the year have no bearing on the company's financial position at the close of the fiscal period.

The auditor should obtain a copy each of the balance sheets at the beginning and the end of the period to be audited, and should make a comparison between them, so that a comprehensive view may be had by him of the changes in the figures during the period under review. A statement of the disposition of the profits should then be prepared from this comparative balance sheet as a further aid in impressing the meaning of the figures upon the mind of the auditor.

The verification of assets and liabilities for convenience will be considered in the order in which the items appear in the form of balance sheet attached hereto. This form of statement has been determined by the desire to meet as nearly as possible the requirements and practice of Federal Reserve Banks.

Specific Instructions and Suggestions Relating to the Separate Headings

CASH

The cash on hand preferably should be counted after banking hours on the last day of the fiscal period to be covered by the audit, and the amount thereof, together with the cash stated to be in the bank, reconciled with that shown by the cashbook. The cash, bills receivable, and investments must be examined on the same day, so as to make it impossible for a treasurer to make up a shortage in one asset by withdrawing negotiable funds temporarily from another.

In counting the cash on hand the auditor must see that all customers' checks produced to him as part of the cash balance have been duly entered in the cashbook prior to the close of the period and should note the dates and descriptions of such checks, and also the dates and descriptions of all advances made from cash and not recorded on the books. Advances to employees should be strictly investigated, and if any are secured by personal checks the auditor should see that the checks are certified by the bank on which they are drawn before the close of the audit.

Certificates must be obtained, as of the evening of the closing date, from the banks in which cash is deposited, by or mailed directly to, the auditor himself. The balances as shown by the certificates must be reconciled with those shown on either the cashbook, the checkbook stubs, or bank registers, taking into consideration outstanding checks.

In verifying the outstanding checks there is only one safe and satisfactory method of proving their accuracy, and that is to compare the credit side of the cashbook from the last day of the fiscal period backward, item by item, with the checks returned from the bank for such period as may be necessary to account for all current outstandings. Any old checks not yet cashed by banks should be made the subject of special inquiry. When this work is completed, a list of the outstanding checks so ascertained should be prepared, showing the dates of the checks and compared with the actual checks returned from the bank at a later date, and any not so returned should be specially investigated. Special care is necessary to see that no checks for cash purposes are drawn at the close of the period and entered in the next period.

Where the currency and bank transactions are kept together in the cashbook and the auditor does not count the cash until a date subsequent to the close of the fiscal year, he must, in addition to verifying the bank balances as of the close of the year, verify them as of the date of the count

of cash. This is absolutely essential when it is considered that, although the cash on hand, which forms only part of the balance, at the date of the count is correct, it does not follow that the total cash is correct.

When receipts are shown in the cash books as being deposited in the bank on the last day of the fiscal period, but are included in the reconciliation statement on account of their not being paid into the bank until the next day, the auditor must obtain letters from the banks acknowledging such deposits.

The deposits shown in the pass books should be checked in detail for the last two or three days of the fiscal period from the books to prove that they were composed of bona fide checks, and that no check drawn by the company was deposited in a bank without being credited to the bank on which it was drawn prior to the close of the fiscal period.

So that the auditor may satisfy himself that deposits are promptly made in bank each day, and that the same checks are paid into bank as are received, it is advisable to call for a number of deposit slips and compare them with the receipts as shown by the cashbook for the days in which the deposits are made. To make such verification absolute the deposit slips should be obtained from the banks.

When the practice of a company is to pay all of its cash receipts into bank, they should be compared and reconciled with the total deposits, as shown by the bank books, and similarly the disbursements should be reconciled with the total checks drawn.

Outstanding checks not examined at a previous audit on account of not having been returned by the banks must be called for and traced into the cashbook at the beginning of the current audit.

NOTES RECEIVABLE

A list of notes receivable outstanding at the end of the fiscal period should be prepared, showing the dates the notes are made, the customers' names, the date due, the amounts of the notes and the interest, if any, contained in the notes. If discounted, the name of the discounting bank should be noted and verification obtained from the bank.

The outstanding notes must be carefully examined with the notes-receivable book, and with the list prepared by or produced to the auditor, the due dates and the dates of making the notes being carefully checked, and when notes have been renewed the original dates should be recorded. When notes have been paid since the close of the fiscal year, the cash should be traced into the books of the company, and, when they are in the hands of

attorneys or bankers for collection, certificates should be obtained from the depositaries.

When notes receivable are discounted by banks the company has a liability therefor which should appear on the balance sheet. Lists of discounted notes not matured at the date of the audit should be obtained from the banks as verification and their totals entered under 20a if the cash therefor is shown as an asset.

The value of collateral, if any, held for notes should be ascertained, as it frequently happens that the notes are worth no more than the collateral.

Notes due by officials and employees must always be stated separately from customers' notes, as must also notes received for other than trade transactions.

Notes due from affiliated concerns must not be included as customers' notes, even though received as a result of trading transactions. Affiliated companies' notes should be shown as a separate item of current assets or as other assets as the circumstances warrant. They may be fairly included in current assets if the debtor company has ample margin of quick assets over its liabilities, including such notes.

The term "quick assets" is used here in the sense in which it is used by Federal Reserve practice. "Current assets" is used to comprise these assets and other assets which, though current, are excluded in determining the eligibility of the paper for Federal Reserve purposes.

Optional.—The best verification of notes receivable is an acknowledgment by the party named in each note as the payor on the due date that the note is a bona fide obligation. Therefore if time permits, and the client does not object, it is advisable to obtain such written confirmation for each note. The auditor should personally mail the letters, inclosing stamped envelope for reply addressed direct to himself.

ACCOUNTS RECEIVABLE

The bookkeepers of the accounts-receivable ledgers should be asked to draw off lists of the open balances at the end of the fiscal period, and distributions of the total columns should be shown on the lists according to the age of the accounts, e.g., not yet due, less than 30 days past due, more than 30 days past due. The accounts paid since the close of the fiscal period should be noted in the lists before taking up the matter of past-due accounts with the credit department, as payment is the best proof that an account was good at the date of the audit.

The totals of the lists of outstanding accounts should agree with the controlling account in the general ledger if separate ledgers are kept.

When credit balances appear on customers' accounts they should be shown on the balance sheet as a separate item and not deducted from the total of debit balances; and debit balances on the accounts-payable ledgers should be treated in the same manner.

The lists must be footed and compared in detail with the customers' accounts in the ledgers.

The composition of outstanding balances should always be examined, as it frequently happens that while a customer may be making regular payments on his account, old items are being carried forward which have been in dispute for a considerable period of time. Such items and accounts which are past due should be taken up with the credit department or some responsible officer, and the correspondence with the customers examined, so that the auditor may form an opinion of the worth of the accounts and satisfy himself that the reserve for bad and doubtful accounts set up by the company is sufficient.

Trade discounts (and also so-called cash discounts, if exceeding 1 per cent) and freights allowed by the company should be inquired into, and if they have been included in the accounts receivable a reserve therefor should be set up in the balance sheet. Also inquiries should be made regarding customers' claims for reductions in prices and for rebates and allowances on account of defective materials, so that it may be seen that a sufficient reserve has been established therefor.

Inquiry must be made as to whether any of the accounts receivable have been hypothecated or assigned, and the sum total of accounts so listed entered under 20b.

The auditor should satisfy himself that the bad debts written off have been duly authorized by responsible officials.

Accounts due from directors, officers, and employees must be stated in the balance sheet separately and not included as trade accounts. This applies also to deposits as security, guaranties, and other extraordinary items not connected with sales.

Accounts due from affiliated concerns must not be included as customers' accounts, even though arising as a result of trading transactions. Affiliated companies' accounts should be shown as a separate item of "current assets" or as "other assets," as the circumstances warrant. They may be fairly included as "current assets" if the debtor company has ample margin of quick assets over its liabilities, including such accounts.

Optional.—The best verification of an open balance is a confirmation by the customer; therefore, if time permits and the client does not object, it is advisable to circularize the customers. The auditor should personally see the circulars mailed after comparing them with the lists of outstanding

accounts. The envelopes for replies sent with the circulars should be addressed direct to the auditor.

In large concerns the system of accounting is generally so arranged that it would be almost impossible for accounts to be paid and not correctly credited on the accounts-receivable ledgers, but in small concerns, with imperfect systems, such occurrences are quite possible, so much so, in fact, that it is generally admitted that the risk of errors and omissions decreases in direct proportion to an increase in bookkeeping.

SECURITIES

Under this caption must be listed securities in which surplus funds of the company or firm have been temporarily invested and which are considered available as "quick assets," i.e., can be turned into money in time of need. Where stocks or bonds represent control or a material interest in other enterprises, the ownership of which carries more or less value to the holder outside of the return thereon, they should be considered as fixed assets.

A list of investments should be prepared showing——

The dates of purchases.
Descriptions of the investments.
Par value of the investments.
The denomination of the shares.
The number of shares or bonds owned.
The total capital stock of the various companies.
The amounts paid for the investments.
The interest and dividends received.
The market values of the investments.
The surplus or deficit shown by the balance sheets of the companies where no market quotations are available.
If hypothecated, with whom and for what purpose.

This list must be compared with the ledger accounts concerned and the total of amounts paid according to the list must agree with the balance of the investment account or accounts.

The securities must be examined by the auditor in person or he must secure confirmation of their existence from those who hold them as collateral. Those in possession of the company must be counted and examined as soon as possible after the audit starts, and all of them must be submitted to him at one time. It is much more satisfactory to see the actual securities than to verify cash receipts and other evidences therefor after the audit has progressed some time.

Certificates out for transfer must be verified by correspondence.

Where the market values of securities are less than the book values, save where the variation is so small as to be trifling, a reserve for loss in value on the balance-sheet date must be set up.

Care must be taken to see that the certificates are made out in favor of the company, or that they are indorsed or accompanied by powers of attorney when they are in the names of individuals.

Coupons on bonds must be examined to see that they are intact subsequent to the latest interest payment date.

The investment schedule must show that the total interest and dividends receivable by the company have been duly accounted for; the income from the investments shown in the profit and loss account must be in accord with this schedule.

When market quotations can not be obtained for investments, the balance sheets of the companies in which investments are held must be examined so that the auditor may form an idea of their value.

In verifying purchases of stock exchange securities the brokers' advices must in all cases be examined in connection with the verification of the purchase price.

Investments in deeds and mortgages must be supported by both the mortgages and insurance policies, and, furthermore, it must be shown that all assessed taxes on the property have been duly paid, that the mortgages have been properly recorded, and that the insurance policies are correctly made out to the company.

If any of the securities have been hypothecated the fact and amount (book value) must be stated under 20d of the balance sheet.

INVENTORIES

Under this caption must be included only stocks of goods owned and under control of the owner. Stocks are often hypothecated and if this is the case the fact should be stated on the balance sheet.

Inasmuch as the accuracy of the profit and loss account is absolutely dependent upon the accuracy of the inventories of merchandise at the beginning and end of the period under review, this part of the verification should receive special attention. When a balance-sheet audit is being made for the first time, the inventory at the beginning of the period should receive as much attention as that at the end, and the auditor should take every precaution to satisfy himself that both inventories were taken on the same basis.

An acceptable program of audit for inventories is as follows:

(1) Secure the original stock sheets if they are in existence and carefully test the typewritten copies with them and with tickets, cards, or other memoranda that show the original count.

(2) See that the sheets are certified to or initialed by the persons who took the stock, made the calculations and footings, and fixed the prices, and satisfy yourself that they are dependable and responsible persons. Obtain a clear and detailed statement in writing as to the method followed in taking stock and pricing it; also a certificate from a responsible head as to the accuracy of the inventory as a whole.

(3) A thorough test of the accuracy of the footings and extensions should be made, especially of all large items.

(4) The inventories should be compared with the stores ledger, work in progress ledgers and finished product records and stock records as to quantities, prices, and values, and any material discrepancy should be thoroughly traced.

(5) Where stock records are kept and no physical inventory is taken at the time of the audit, ascertain when the last physical inventory was taken and compare it with the book records. If no recent comparison is possible, select a few book items of importance and personally compare with the actual stock on hand.

(6) Where no stock records are kept, a physical inventory should be taken preferably under the general direction of the auditor. After the inventory is completed, he should apply the same tests to verify its accuracy as if the inventory had been taken before his arrival upon the scene.

(7) When the cost system of a company does not form a part of the financial accounting scheme there is always a chance that orders might be completed and billed, but not taken out of the work in progress records. Especially is this the case when reliance is placed on such records to the extent that a physical inventory is not taken at the end of the period to verify the information shown therein. In these cases the sales for the month preceding the close of the fiscal period should be carefully compared with the orders in progress as shown by the inventory, to see that nothing that has been shipped is included in the inventory in error. Cost systems which are not coordinated with the financial accounts are unreliable and frequently misleading. Special attention should be called to every case in which the cost system is not adequately checked by the results of the financial accounting.

(8) Ascertain that purchase invoices for all stock included in the inventory have been entered on the books. Look for postdated invoices and give special attention to goods in transit.

(9) See that nothing is included in the inventory which is not owned

but is on consignment from others. If goods consigned to others are included, see that cost prices are placed thereon, less a proper allowance for loss, damage, or expenses of possible subsequent return. This does not include goods at branches, as the valuing of such stocks will be governed by the same principles as apply at the head office.

(10) Ascertain that nothing is included which has been sold and billed, and is simply awaiting shipment.

(11) If duties, freight, insurance, and other direct charges have been added, test them to ascertain that no error has been made. Duties and freight are legitimate additions to the cost price of goods, but no other items should be added except under unusual circumstances.

(12) As a check against obsolete or damaged stock being carried in the inventory at an excessive valuation, the detailed records for stores, supplies, work in progress, finished products, and purchased stock in trade, should be examined and a list prepared of inactive stock accounts, which should be discussed with the company's officials and satisfactory explanations obtained.

(13) The auditor should satisfy himself that inventories are stated at cost or market prices, whichever are the lower at the date of the balance sheet. No inventory must be passed which has been marked up to market prices and a profit assumed that is not and may never be realized. If the market is higher than cost, it is permissible to state that fact in a footnote on the balance sheet.

(14) It may be found that inventories are valued at the average prices of raw materials and supplies on hand at the end of the period. In such cases the averages should be compared with the latest invoices in order to verify the fact that they are not in excess of the latest prices, and also with the trade papers, when market prices are used, to see that they are not in excess of market values.

(15) Make an independent inspection of the inventory sheets to determine whether or not the quantities are reasonable, and whether they accord in particular instances with the average consumption and average purchases over a fixed period. Abnormally large quantities of stock on hand may be the legitimate result of shrewd foresight in buying in a low market, but may, on the other hand, arise from serious errors in stock taking.

(16) Always attempt to check the totals by the "gross profit test" and compare the percentage of gross profit shown with that of previous years. In a business where the average gross profit remains fairly constant this test is a dependable one, because, if the rate of gross profit is apparently not maintained and the discrepancy can not be satisfactorily accounted for

by a rise or fall in the cost of production or of the selling price, the difference will usually be due to errors in stock taking.

(17) In verifying the prices at which the work in progress is included in the inventory, a general examination and test of the cost system in force is the best means of doing this work satisfactorily. In a good cost system little difficulty will be found with the distribution of the raw materials, stores, and pay roll, but the distribution of factory overhead cost is one that should receive careful consideration, the main points to be kept in view being:

(*a*) That no selling expenses, interest charges, or administrative expenses are included in the factory overhead cost.

(*b*) That the factory overhead cost is distributed over the various departments, shops, and commodities on a fair and equitable basis.

(18) No profit should be included in the price of finished products or stock in trade. The price list should be examined to see that the cost prices of stock are below the selling prices after allowing for trade discounts, and, if they are not, a reserve should be set up on the balance sheet for this loss. If the company takes immediate steps to increase the selling price, however, the amount of this reserve may be limited to the loss on goods which may have been sold since the close of the period to the date of the discovery.

(19) In the case of companies manufacturing large contracts it is frequently found necessary to make partial shipments thereof. The question then arises as to whether it is permissible to include the profits on these partial shipments in the profit and loss account. As a matter of fact, it is evident that the actual cost can not be known until the order is completed. It may be estimated that a profit will ultimately be made, yet unforeseen conditions, such as strikes, delays in receiving material, etc., may arise to increase the estimated cost. It is better not to include the profits on partial shipments, but information of this character which may have its influence in the decision of the banker upon a proposed loan may properly be laid before him. Of course, an exception should be made in cases where the profit on the partial shipments largely exceeds the selling price of the balance of the order.

(20) The selling prices for contract work in progress should be ascertained from the contracts, and where it is apparent that there will be a loss on the completed contract a due proportion of the estimated loss should be charged to the period under audit by setting up a reserve for losses on contracts in progress.

(21) If a company has discontinued the manufacture of any of its products during the year, the inventory of such products should be carefully scrutinized and, if unsalable, the amount should be written off.

(22) The inventory should be scrutinized to see that no machinery or other material that has been charged to plant or property account is included therein.

(23) Partial deliveries received on account of purchase contracts for material, etc., should be verified by certificates from the contractors, both as to quantities and prices.

(24) Advance payments on account of purchase contracts for future deliveries should never appear in an inventory, but be shown on the balance sheet under a separate heading.

(25) Trade discounts should be deducted from inventory prices, but it is not customary to deduct cash discounts. However, this may be done when it is the trade practice so to do.

(26) While the inventory is being verified, the auditor should ascertain the aggregate sales for the last year. If the turnover has not been rapid, it may be due to a poor stock of goods. Some business men dislike to sell below cost and would rather accumulate a big stock of old goods than dispose of the old and unseasonable stock at a sacrifice. The usual outcome is that the stock becomes unwieldy and funds are lacking to purchase new goods. The inventory and the gross sales may, therefore, have a direct connection.

(27) It may be well to reiterate that interest, selling expenses, and administrative expenses form no part of the cost of production, and therefore should not be included in the inventory in any shape.

COST OF FIXED PROPERTY

In preparing the leading schedules for the accounts grouped under this heading, such as real estate, buildings, plant, machinery, etc., the balances at the beginning of the period, the additions to or deductions from the accounts during the year, and the balances at the end of the period must be shown.

The total of the balances at the beginning of the period must agree with the cost of property figures given in the balance sheet at that date, and the balances at the end of the period with the amount shown in the balance sheet that is being audited. The charges entering into the additions must be verified in detail, and in this connection the following notes are of value:

(1) Authorizations for the expenditure made during the year should be examined, and where the costs of the additions have overrun the sums authorized, inquiries should be made in regard thereto. The authorizations should show the accounts to which the expenditures are chargeable,

the amounts thereof, the approvals of the comptroller and manager, and descriptions of the jobs. When the authorizations are not specific as to the work done, the actual additions should, if possible, be inspected.

(2) The auditor should satisfy himself before approving additions that they were made with the object of increasing the earning capacity of the plant, and that they are not of the nature of either renewals or improvements, and in this connection changes in the production and capacity of the plant should receive consideration.

(3) To verify the pay roll and store and supply charges to jobs, one or two pay roll distribution reports should be examined in detail, and also one or two storehouse reports. In cases where large purchases have been made from outside parties for capital construction work, the vouchers therefor should be examined and the usual precautions taken to see that they are properly approved for the receipt of materials, prices, etc.

(4) For purchases of real estate the title deeds should be examined, together with the vouchers, and it should be seen that the deeds have been properly recorded.

(5) While it may be considered permissible to make a charge for factory overhead cost to additions to property such as, e. g., time of superintendent and his clerical force employed on construction work, etc., it can not be deemed conservative business practice, inasmuch as the probabilities are that the overhead charges of a plant will not be decreased to any extent even though additions are not under way, and, therefore, the absorption of part of these charges when additions are in progress, has the effect of reducing the operating costs, as compared with months in which no construction work is under way.

(6) Construction work in progress at the end of the fiscal period should be shown in the balance sheet under the heading of fixed assets and not as part of the inventories. This is important to bear in mind because construction work is not an asset that can be quickly turned into money, while everything in the inventory is supposed to be realizable in cash within a reasonably short time.

(7) The auditor should inquire as to whether any installments are due on account of construction work in progress which is being carried on by outside parties; and if so, the liabilities for these installments should be included in the balance sheet, as they may have a direct bearing on the amount of available cash on hand.

(8) When a company uses leasehold properties the leases should be examined and notes made of the periods covered, so that it may be seen that improvements, etc., on such properties are written off over the periods covered by the leases.

(9) The auditor should satisfy himself that the reserves for depreciation of buildings, machinery, equipment, etc., are adequate to reflect the deterioration in the value of the fixed properties. If in his opinion the reserves shown on the balance sheet are insufficient, he should call attention to the matter in his certificate.

(10) Care should be taken to insure that property destroyed by fire or otherwise prematurely put out of service is correctly treated in the books. Any portion of the original charge for such property which is not recoverable through insurance, as salvage or otherwise, and has not been provided for by the depreciation scheme should be written off.

It is to be observed that the foregoing notes are to be applied only to cost of properties incurred during the period under audit. In addition, information may usefully be obtained on broader lines in regard to the composition of the real estate, building, and machinery accounts, and showing what principal property is represented thereby and how the accounts have been built up from year to year for a reasonable time past if not from the inception of the business. The information derived therefrom is valuable only in indicating the progressive policy of the concern, the extent to which it reinvests undivided surplus in its plant, etc. Beyond these facts the banker who is asked for ordinary discounts or short-term loans is not interested; he looks more to the quick assets for his security.

Optional.—When the loan is greater than the quick assets seem to justify the auditor should suggest a reliable verification of the cost of property prior to the period under audit. Such action may become necessary even to the extent of calling for an appraisement by disinterested outside experts.

DEFERRED CHARGES TO OPERATIONS

Under this heading in the balance sheet are grouped such items as unexpired insurance, bond discounts applicable to a future period, prepaid royalties, experimental charges, etc. After the clerical accuracy of the deferred charges has been verified the auditor should satisfy himself that they are properly carried forward to future operations.

Wherever possible, documentary proof must be produced in support of the items carried forward, as, for example, with unexpired insurance the policies must be examined to verify the dates of expiration, the amounts covered, and the proportion of the premiums carried forward; with royalties the agreements must be examined; with experimental charges the vouchers and particulars of the work done must be looked into, etc.

The examination of the deferred charges will usually furnish the auditor with valuable information in regard to the accounts of the company, as, e.g.:

(1) The verification of experimental charges carried forward will generally furnish information as to the production and future policy of the company.

(2) Royalty vouchers will generally furnish a check on the production of mines.

(3) An examination of the insurance policies will show if the properties are mortgaged or covered by lien, and thus be an additional verification of the liability for mortgages on real estate, buildings, etc., shown in the balance sheet.

(4) The assets covered by insurance will be ascertained and if any omissions are discovered they should be mentioned.

NOTES AND BILLS PAYABLE

Under this caption appear notes payable and drafts accepted. Schedules should be prepared under the subcaptions, and in columns headed:

Date of making the notes or drafts.
Due dates.
Names of creditors.
Collateral hypothecated.
Additional indorsers.
Interest accrued to date of audit.
Notations of renewals (as information of this nature furnishes a guide to the state of the concern's credit).

The schedule must be compared with the notes-payable book and the total of the aggregate must agree with the balance of the ledger account of notes payable.

Statements must be obtained from all banks and brokers with whom the concern does business, showing all notes and drafts discounted or sold by them for the benefit of the concern. These statements when received must be checked against the loans shown on the concern's books and approved in the minutes of the company.

Inasmuch as a note is a negotiable instrument, care must be taken to see that all of those recorded as paid during the year under audit have been properly discharged, and the canceled notes are the best evidence of this fact.

Careful attention should be given to the collateral deposited for loans, and statements as to the existence of such collateral should be obtained from the holders thereof. Such hypothecation of any of the concern's assets should be accounted for on the balance sheet.

When practicable the auditor might suggest to the client the advisability of drawing notes payable on blanks bound in a book, like a check book, with a stub for each blank, the blank and the stub to bear identical numbers. The officer, or officers, signing the notes could, in such case, initial the stub as a certificate to the amounts, payees, and terms of the notes issued. If this were done, the auditing of bills payable would be greatly facilitated.

ACCOUNTS PAYABLE

A list of balances due on open accounts must be prepared and carefully checked with the ledger accounts, care being taken to see that no open account on the ledger has been omitted from the list. It should be ascertained that the balances represent specific and recent items only. When any account does not appear regular a statement from the creditor should be obtained. If there are many such accounts in dispute, and they amount to so large a sum as to affect appreciably the total of current liabilities, the general causes for the disputes should be inquired into and note made of the matter for the consideration of the banker.

In concerns with modern voucher systems accounts payable are easily verified, as all liabilities are then included in the books when incurred. Care should be taken, however, to see that all goods received on the last day of the fiscal period, as shown by the receiving records, and also all goods that were in transit and belonged to the concern on that date, are included as liabilities, and the corresponding assets included in the inventories. This test is necessary, as an increase in the accounts payable may have a very important bearing on the financial position of the concern if the cash on hand is small.

Monthly expenses outstanding can usually be ascertained by a comparison of the expenses of the last month of the fiscal period with previous months, and those of the year with the previous year. The voucher record should, however, be examined for the months subsequent to the close of the fiscal year, in case any expenses included therein are applicable to the fiscal period under audit.

When a first-class voucher system is not in operation the auditor must take additional precautions to satisfy himself that all liabilities are included in the accounts, among which may be mentioned:

(1) Payments made in the months subsequent to the date of the fiscal period as shown by the cashbook, which should be carefully scrutinized to see that none of them is applicable to the period under review.

(2) The file of bills not vouchered or entered on the books should be examined to see that none of them belongs to the period under audit.

(3) A careful perusal of the minutes of a company may further assist the auditor in determining liabilities.

When a company has large purchase contracts in force for future deliveries they should be examined, for if the contract prices are greater than market prices, it might be necessary to set up a reserve for this loss. Any debit balance due to advance payments on such contracts or to any other cause should be shown on the balance sheet under a separate heading.

If the business under audit is one where there is any possibility of goods having been received on consignments, and part or all of such goods having been sold without a liability therefor having been shown in the books, the auditor must use all due diligence to cover the point fully. This may readily happen, as consignment accounts are usually treated as memoranda only.

If inquiry develops the fact that goods have been received on consignment, all records in connection therewith should be called for. If the goods have all been sold, the consignor's account should show the full amount due, and if the debt is a current one, the amount will appear among accounts payable due to trade creditors. Where only part of the goods have been sold, the net proceeds due to the consignors should be shown on the balance sheet under the caption of "Accounts payable consignors."

As an additional precaution against the omission of liabilities a certificate should be obtained from the proper officer or member of the concern stating that all outstanding liabilities for purchases and expenses have been included in the accounts of the period under review or of former periods. In many cases it is also advisable to obtain a certificate from the president stating that all liabilities for legal claims, infringements of patents, claims for damages, bank loans, etc., have been included, as he may be the only executive officer of the company to know the extent of such obligations.

CONTINGENT LIABILITIES

It is not enough that a balance sheet shows what must be paid; it should set forth with as much particularity as possible what may have to be paid. It is the duty of an auditor who makes a balance-sheet audit to discover and report upon liabilities of every description, not only liquidated debts but possible debts. The following are the usual forms under which contingent liabilities will be found:

Indorsements.—Inquiry of the officers or partners of the concern should be made as to whether any indorsement of outside paper has been made and as to any security received to protect the concern. Such inquiry

should be particularly strict if it is known that any of the officers or partners are interested in other enterprises.

Guaranties.—Similar action should be taken in the matter of guaranties.

Unfulfilled contracts.—Contracts to accept the delivery of goods contracted for before the date of the balance sheet, may call for the payment of large sums of money within a short time. In the case of raw materials, for a manufacturer, this might be a perfectly legitimate reason for seeking a temporary loan pending production and sale, but for a merchant whose balance sheet shows a large stock of goods on hand, it might indicate a real liability impending with assets of a doubtful character to offset it. In every audit, therefore, the auditor should call for copies of all orders for future delivery, and if such orders call for stock in excess of the current and reasonable prospective demand, mention should be made on the balance sheet and a report submitted, the details depending upon the circumstances of each particular case.

Items other than those arising from the specific hypothecation of current assets to be listed under item 20 should appear as a footnote on the liability side of the balance sheet, the total amounts being stated for each subheading and such additional report made as will convey clear information to the banker.

ACCRUED LIABILITIES

Under this caption are grouped such items as interest, taxes, wages, etc., which have accrued to the end of the period under audit, but are not due and payable until a later date. The verification of such items can be accurately made from the books and records. Special attention may be directed to the following:

Interest payable.—Many of the liabilities which appear on a balance sheet carry interest. Such items as bonds and notes payable are obvious, but the auditor should also consider the possibility of accounts also bearing interest, as enough book accounts, when past due, do bear interest to warrant inquiry being made. Loan accounts of partners and officers of corporations almost invariably bear interest; also judgments, overdue taxes, and other liens.

Taxes.—The amount of accrued State and local taxes can be ascertained from an examination of the latest tax receipts; though in some cases, as the period for which the taxes are paid is not shown on the face of the receipt, it may be necessary to make inquiries of the proper taxing authorities as to the period covered.

Under the Federal income tax law a tax of 2 per cent is imposed upon

the net profits of a corporation, which must be paid even if the corporation is dissolved before the end of the year during which the tax is imposed. As the tax is specifically based upon the net profits of a particular period, although payable some months thereafter, the tax accrues throughout the specified period, and if a net profit is disclosed upon the closing of the books at any date during the year, a reserve of 2 per cent must be shown on the balance sheet as an accrued tax.

Wages.—Where the date of the balance sheet does not coincide with the date to which the last pay roll of the period under audit has been calculated, the amount accrued to the date of the balance sheet must be ascertained and entered as a liability, unless such amount is trifling. It will suffice to take the proportion of a full week's pay roll (six days) without reference to possible daily variations.

Water rates, etc.—Where bills for such expenses as water, gas, etc., are not rendered monthly, the auditor must enter the accrual of the proper proportion since the last bill as a liability.

Traveling expenses and commissions.—It is important to note whether the accounts of all traveling salesmen have been received and entered before the books are closed. The auditor should secure a list, and if any report was not so entered, provision should be made for it unless the amount is likely to be trifling.

Ample provision should be made for all commissions eventually payable on sales which have been billed to customers. As commissions are frequently not payable to salesmen until the sales have been collected from the customers, accrued commissions are often omitted from the books. As they must, however, be paid out of the proceeds of the sales on which the full profit has already been taken into the accounts, they should be set up as an accrued liability.

Legal expense.—All concerns have more or less litigation. Before the books are closed the lawyers should be requested to send in a bill to date. If one is not found, the auditor should ascertain the amount, if any, probably due and set it up as an accrued liability.

Damages.—If the concern is insured against liability for damages to employees or the public, a proportion of the premiums paid in advance for the unexpired time covered by the insurance will appear in "Deferred charges." But there may be claims or suits for other damages not covered by insurance, and where the auditor finds any evidence which leads him to suspect there may be liability of this nature he should insist upon being informed of all the facts. He can then form an opinion as to the amount that should be set up as an accrued liability, or, if the outcome is uncertain, as a reserve against possible loss.

BONDED AND MORTGAGE DEBT

A copy of the mortgages must be examined and the terms thereof noted. The amount of bonds registered, issued, and in treasury, rate of interest, and duration of the bonds, should be shown on the face of the balance sheet. A certificate should be obtained from the trust company certifying the amount of bonds outstanding, etc., as verification of the liability stated in the balance sheet. The interest on the bonds outstanding, shown in the balance sheet, should be calculated and reconciled with the interest on bonds, as shown in the profit and loss account.

Sinking-fund provisions in mortgages should be carefully noted and care should be taken to see that they are provided for in the accounts of the company, and any default noted in the balance sheet.

Bonds redeemed during the period or previously should be examined to see that they have been properly canceled, or, if they have been destroyed, a cremation certificate should be obtained from the trustees.

Mortgages sometimes stipulate that the current assets must be maintained at a certain amount in excess of the current liabilities, and the auditor must give due consideration to such matters and any other stipulation in regard to the accounts, or any audit thereof, that may be referred to in the trust deed, and see that they have been complied with.

Mortgages.—As a mortgage derives its chief value from the fact that upon registry it becomes a lien, the auditor should verify the existence of such an obligation by inspecting the public records, not only with reference to such as may be found on the company's books, but also any that may still appear on the public records as unsatisfied. If the auditor lacks the necessary facilities for making a search it will be worth his while to arrange with a local lawyer or title company whereby, for a small fee, any mortgages or judgments entered against the concern under audit will be reported to him.

In any event the auditor must verify the amount as recorded in the account, the rate, the due date, and the property covered thereby.

It should be borne in mind that a payment on account of a mortgage must be recorded or the entire amount will remain as an encumbrance on the property. Therefore, if payments on account appear, the auditor should ascertain if they have been so recorded; if not the fact should be noted on the balance sheet.

Judgments.—The same procedure should be followed in verifying judgments as in verifying mortgages. As many business men consider that the entry of an invoice is an admission of liability, and will not permit the entry of a claim which they propose to fight, it is sometimes difficult for an

auditor to find any evidence of such liens. Even admitting the fact, they may still refuse to allow the judgment to be entered on the books as a liability, in which case it is proper for the auditor to include it as a footnote on the balance sheet as a contingent liability.

Unpaid interest.—When considering the matter of liens it should be noted that interest unpaid is a lien as well as unpaid principal, so where the auditor finds evidence of interest on liens being in default, he should add it to the principal in each case.

CAPITAL STOCK

As a rule trust companies are the transfer agents for the capital stock of large corporations and for verification purposes it is sufficient to obtain letters from them certifying to the capital stock outstanding.

Where companies issue their own stock, the stock registers and stock certificate books should be examined and compared with the lists of outstanding stockholders.

On the balance sheet each class, if more than one, of stock must be stated, giving amount authorized, issued, and in treasury, if any. In the case of companies with cumulative preferred stocks outstanding a note must be made in the balance sheet of the dividends accrued but not yet declared.

If stock has been sold on the installment plan, the auditor should ascertain that the calls have been promptly met and whether any are in arrears. If special terms have been extended to any stockholder, approval of the board of directors is necessary and the minutes should be examined accordingly.

If any stock has been sold during the period under audit, the auditor should verify the proceeds of the sales.

SURPLUS

The auditor should give consideration to the surplus at the beginning of the period. This item represents the accumulated profits prior to the beginning of the fiscal period under review, and should be compared with the surplus shown on the balance sheet of the previous year, and with the ledger account, to see that it corresponds, and if it does not, a reconciliation statement should be prepared giving full details of the differences.

PROFIT AND LOSS

The auditor should obtain the profit and loss statement for three years, at least, including the period under audit, and after verifying them by

comparison with the ledger account, prepare a statement in comparative form. This comparison will furnish valuable information to the banker as to the past progress of the concern under audit.

A satisfactory form of profit and loss account is annexed hereto, but any other form giving substantially similar information is acceptable.

While it would be impracticable in an ordinary balance-sheet audit, and, at the same time, somewhat useless to make a detailed check of all the transactions entering into the composition of the profit and loss account, there are certain main principles to be kept in view which are briefly outlined below.

SALES

Whenever it is possible, the quantities sold should be reconciled with the inventory on hand at the beginning of the period, plus the production, or purchases, during the period, less the inventory on hand at end of the period.

Where a good cost and accounting system is in force, the sales records will very probably be in good shape, but nevertheless, the auditor should satisfy himself from the shipping records that the sales books were closed on the last day of the fiscal year, and that no goods shipped after that date are included in the transactions.

When an audit is being made for the first time, the auditor should satisfy himself that the sales at the beginning of the period were recorded in accordance with the dates of shipments. Such verifications can be made conveniently by a direct comparison of the shipping memoranda with the invoices billed.

Allowances to customers for trade discounts, outward freights, reductions in prices, etc., should be deducted from the sales in the profit and loss account, as the amount of net sales is the only figure of interest to the bankers.

The future bookings at the close of the fiscal year should be looked into, as a comparison of orders on hand with corresponding periods of other years furnishes the bankers with an idea of the concern's business outlook.

COST OF SALES

The inventory at the beginning of the period, plus purchases during the period, less inventory at the end of period, gives the cost of sales. In a manufacturing concern the factory cost of production takes the place of purchases. These items will have already been verified in auditing the balance sheet, but nevertheless care should be taken to see that this head-

ing has not been made a dumping ground for charges which would be more properly embraced under the heading of special charges. The composition of the items entering into the cost of sales should be traced in totals into the cost ledgers or accounts.

GROSS PROFIT ON SALES

This is obtained by deducting the cost of sales from the net sales. The ratio of gross profits to net sales should be calculated and compared.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

Under these general headings should be set down the expenses itemized to correspond with the titles of the ledger accounts kept in each division. In checking the totals of each account with the statement for the period under audit, special attention to credits in these accounts should be given to see that none have been made for the sale of capital assets and for other items which should not appear in expense accounts. The percentages of the totals of each division and of the aggregate total to net sales should be calculated for each year for comparison.

NET PROFIT ON SALES

This is obtained by deducting the aggregate total of the selling, general, and administrative expenses from the gross profit on sales, and shows the net earnings of the concern on its real business. Ratio to sales should be calculated for each year for comparison.

OTHER INCOME

Under this heading is embraced any income that may be derived from sources outside of sales, such as income from investments, interest, discounts, etc. Schedules should be prepared of each item, and the auditor should satisfy himself of their accuracy and of the propriety of including them as income.

DEDUCTIONS FROM INCOME

Under this heading are grouped such items as interest on bonded debt, interest on notes payable, etc. The same procedure of verification as in the case of other income should be followed.

NET INCOME—PROFIT AND LOSS

Adding other income to gross income and deducting deductions from income gives the net income or profit and loss for the period, which is the amount that should be carried to the surplus account.

SURPLUS ADDITIONS AND DEDUCTIONS

Items of unusual or extraordinary profit which do not belong strictly to the period under audit, or can not be said to be the legitimate result of the ordinary transactions of the concern, should be entered here and verified with the surplus account. Similarly, deductions should be treated. Also dividends declared should be entered in the surplus account and as an item under this caption, inasmuch as it is the usual custom to declare dividends "from net earnings and surplus." After adding special credits to and deducting special charges from the net income we have the total profit and loss for the whole period from all sources which, added to the surplus balance at the beginning of the period, gives us the surplus at the end of the period, which should agree with the surplus as stated on the balance sheet.

GENERAL

These instructions cover audits of small or medium-sized concerns. In large concerns having, for instance, tens of thousands of accounts or notes receivable, the detail procedure suggested would be impracticable, and internal check should make it unnecessary. In such cases only tests can be made, but the auditor must always be prepared to justify his departure from a complete program by showing that the purposes sought to be accomplished thereby have been adequately effected by his work.

Any extensive clerical work, such as preparations of lists of notes receivable, etc., should be performed by the client's staff, so as to avoid unnecessary employment of professional staff in merely clerical work and consequent undue expense.

FORM OF CERTIFICATE

The balance sheet and certificate should be connected with the accounts in such a way as to ensure that they shall be used only conjointly. This rule applies also to any report or memorandum containing any reservations as to the auditor's responsibility; any qualification as to the accounts,

or any reference to facts materially affecting the financial position of the concern.

The certificate should be as short and concise as possible, consistent with a correct statement of the facts, and if qualifications are necessary the auditor must state them in a clear and concise manner.

If the auditor is satisfied that his audit has been complete and conforms to the general instructions of the Federal Reserve Board, and that the balance sheet and profit and loss statement are correct, or that any minor qualifications are fully covered by the footnotes on the balance sheet, the following form is proper:

I have audited the accounts of Blank & Co. for the period from..... .....to.....and I certify that the above balance sheet and statement of profit and loss have been made in accordance with the plan suggested and advised by the Federal Reserve Board and in my opinion set forth the financial condition of the firm at.....and the results of its operations for the period.

(Signed) A. B. C.

[FORM FOR PROFIT AND LOSS ACCOUNT.]

Comparative statement of profit and loss for three years ending.....19...

	Year ending—		
	19—	19—	19—
Gross sales	$.....	$.....	$.....
Less outward freight, allowances, and returns	.....	.....	.....
Net sales	.....	.....	.....
Inventory beginning of year	.....	.....	.....
Purchases, net	.....	.....	.....
Less inventory end of year	.....	.....	.....
Cost of sales	.....	.....	.....
Gross profit on sales	.....	.....	.....
Selling expenses (itemized to correspond with ledger accounts kept)	.....	.....	.....
Total selling expense	.....	.....	.....
General expenses (itemized to correspond with ledger accounts kept)	.....	.....	.....
Total general expense	.....	.....	.....

	Year ending—		
	19—	19—	19—
Administrative expenses (itemized to correspond with ledger accounts kept)	$.....	$.....	$.....
Total administrative expense	.....	.....	.....
Total expenses	.....	.....	.....
Net profit on sales	.....	.....	.....
Other income:			
Income from investments	.....	.....	.....
Interest on notes receivable, etc	.....	.....	.....
Gross income	.....	.....	.....
Deductions from income:			
Interest on bonded debt	.....	.....	.....
Interest on notes payable	.....	.....	.....
Total deductions	.....	.....	.....
Net income—profit and loss	.....	.....	.....
Add special credits to profit and loss	.....	.....	.....
Deduct special charges to profit and loss	.....	.....	.....
Profit and loss for period	.....	.....	.....
Surplus beginning of period	.....	.....	.....
Dividends paid	.....	.....	.....
Surplus ending of period	.....	.....	.....
	.....	.....	.....

[*For form of Balance Sheet, see pages 372,373.*]

APPENDIX B

EXAMPLE OF PROVISIONS CONTAINED IN A PREFERRED STOCK AGREEMENT

The stock certificates of a company incorporated in 1921, contain the following definitions and provisions:

1. "Gross Income" of any fiscal period shall be the gross sales of such period plus the income received from interest, rentals, commissions, dividends, and all other current revenues of every description. The company may set up reserves out of the gross income of any fiscal period for anticipated charges reasonably accruing but not capable of being definitely ascertained, but any excess of such reserves set up after December 27, 1919, and remaining after such charges shall have been definitely ascertained, shall be included in the gross income for the fiscal period in which such ascertainment shall have been made. Gross income of any fiscal period shall further include any other net credits made during such period by the Company direct to surplus or to profit and loss, or to any other account which would make such net credits available for dividends on junior stock, whether such net credits arise from the sale of property, adjustments of reserves, or otherwise, but not if such net credits arise from the adjustment of reserves set up on or before December 27, 1919.

2. "Net Income" shall be the balance of income remaining after deducting from the gross income of any fiscal period all returned sales; allowances and discounts to customers; raw materials, supplies, and direct and indirect labor used in the manufacture of finished products sold, selling, general, and administrative expenses; reserves for insurance and inventory depreciation; all interest accrued on borrowed money; reserves for all current taxes, accrued and estimated; bonuses to general executive officials of the Company not exceeding in the aggregate their total salaries; bonuses to employees; bad accounts written off; reserves for doubtful accounts; and reserves for maintenance and depreciation of buildings and equipment at such percentages of the valuation thereof as the Company may from time to time deem advisable, but in no event at a rate of less than 2 per cent of the value thereof for all buildings, 5 per cent of the value thereof for all fixed machinery and equipment, and 20 per cent of the value thereof for all automobiles, trucks, and wagons; and any other expenses, losses, and charges.

3. "Fixed Assets" shall be the investment in plant and equipment, including land and buildings, plus all other assets of the Company except only (a) current assets and (b) patents, trade-marks, trade-names, good-will, and similar assets. The investment in plant and equipment owned on November 17, 1916, and included in the appraisal of that date, shall never be valued at more than one million, five hundred thousand (1,500,000) dollars; and other plant and equipment then owned, as well as plant and equipment subsequently bought or installed, shall never be valued at more than cost, and both shall be taken after deducting the reserve for depreciation. The valuations placed upon the fixed assets of the Company at the beginning of any accounting period, in determining the amount of its net tangible assets, as hereinafter defined, shall be used in determining the amount of the reserve for the same period for the maintenance and depreciation of buildings and equipment provided for in the foregoing paragraph defining "net income."

4. "Current Assets" shall include:

(a) Cash on hand and in bank, including cash in the sinking fund; good and collectible notes, accounts, bills, and trade acceptances receivable, including accrued interest and rents and royalties receivable, but not including receivables representing advances made to finance the acquisition of fixed assets; and prepaid insurance, interest, and taxes, and other prepayments.

(b) Manufactured products; products in process of manufacture, and materials and supplies, such products, materials, and supplies to be valued on the basis of actual cost, or market value, whichever is lower.

(c) Bonds of the United States Government at not exceeding their market value.

(d) Certificates of indebtedness of the United States Government at not exceeding their par value.

(e) Other readily marketable securities paying regular interest or dividends, valued at not more than the market value thereof (excluding bonds or stocks issued by the company or by a constituent company, or issued by a corporation of which the Company or constituent company shall at the time own or control, directly or indirectly, a majority of the capital stock).

5. "Current Liabilities" shall include: accounts, bills, notes, and acceptances payable, maturing within one year after their date; loans from

banks and bankers; salaries, wages, interest, rents, royalties, and taxes accrued, including income and excess profits taxes.

6. "Net Current Assets" shall be the current assets, less the current liabilities.

7. "Net Tangible Assets" shall be the net current assets plus the fixed assets less any debts not included among the current liabilities, including purchase money mortgages and debentures.

8. "Constituent Company" shall be taken to mean any corporation or association of which at least seventy-five (75) per cent of the shares having ordinary voting power (including directors' qualifying shares) are owned by the Company.

9. "Fiscal Period" shall be one or more accounting periods, at the option of the company, but shall never exceed fifty-three weeks.

Definitions 1 and 2 refer to a consolidated statement of income of the Company and all its constituent companies, after eliminating all intercompany items and the proportion of the net income of constituent companies not accruing to the Company.

Definitions 3 to 7, inclusive, refer to a consolidated balance sheet of the Company and all its constituent companies, after eliminating all intercompany items. In any consolidation of accounts made under these definitions, the addition to net tangible assets in respect of the net tangible assets of any constituent company shall in no case exceed the excess of the net tangible assets of such constituent company over the sum of the par value of the common stock (or the declared or stated value thereof, if any, in the case of common stock without par value) of such constituent company not owned by the Company, and the proportionate interest of such unowned common stock in the surplus of such constituent company, and twice the par value of the preferred stock of such constituent company not owned by the Company.

Any audit of the books and accounts of the Company and its constituent companies made by a certified public accountant, and made, or certified by such accountant to have been made, upon the basis of the definitions in this article contained, shall be conclusive upon the Company and all holders of preferred stock, unless and until such audit shall be duly adjudged erroneous.

INDEX

A

ABNORMAL CONDITIONS,
  accounts outstanding under, 90–92
  inventory valuations under, 129–131, 159
ACCEPTANCES,
  advantages of, 257
  discounting of, 257
  indorsements of, 256–258
  trade,
    not considered notes receivable, 109
ACCOMMODATION INDORSEMENTS,
  as liabilities, 251–255
ACCOUNTING,
  auditor's familiarity with various methods, 52
  distinguished from auditing, 1
  errors of principle, 23, 482
  good practice of, and good business, 125
  investigation of system, 455
  knowledge of, essential to auditor, 3
  proposal of Federal Reserve Board, 679–705
ACCOUNTS,
  book of,
    knowledge of, by auditor, 53
  controlling,
    postings to credit of customers' accounts proved through, 511
    reconcilement with subsidiary records, 61
    subsidiary ledgers, 619
    test of ledger-posting covered by, 497, 499, 500
  manipulation of, 492
  nominal,
    verification of, 511
  surplus, 279
  terminology, 296–300
ACCOUNTS PAYABLE,
  as liabilities, 225–228
  classification of, 226
  internal checking of, 65
  omitted in report, 417
  open accounts in ledger compared with, 229
ACCOUNTS RECEIVABLE,
  acknowledgment of debt from debtor, 106
  analysis of, 93
ACCOUNTS RECEIVABLE—*Continued*
  anticipating profits not earned, 92
  appraisal of, 91–96
  bad debts, 90, 580
  cash deposited as security, 106
  classification of, 62
  distinction between inventory value and, not sound, 150
  effect of Cuban moratorium on, 93
  export sales, 104
  fictitious, 100
  foreign exchange rates, 105
  fraud connected with, 515
  from affiliated companies, 97–99
  from officers or employees, 99
  instalment accounts, 102
  inventory valuation, 120
  liquidating partnership, 466
  not current assets, 153
  not due within one year, 100, 153
  omitted in report, 417
  overdue, 91–96
  pledged or assigned, 80, 94
  purchase of, 79
  reserves for, 31, 90
  reserves for bad debts deducted from, 314
  schedule of, 579
  separation of doubtful, 94
  under abnormal conditions, 92
  valuation of overdue, 91–96
  verification of, 89
    in balance sheet audit, 290–334
    in detailed audit, 515–537
ACCRUALS,
  detailed audit, 495
  expenses, 330
  notes receivable, 110
ADAMS, H. C., ON DEPRECIATION, 635
ADDITIONS, 586, 590
  concealment of, 215
  in book values of property, 178
ADMINISTRATION (See "Check system")
ADVERTISING,
  absorption of expenses as deferred charges, 446, 569
  by auditor,
    ethical aspect of, 15
  misleading, 419

AFFILIATED COMPANIES,
amounts due from, 97–99
consolidated balance sheet, 335–347
consolidated income account, 347–351
AGREEMENTS,
written, before making audit, 40
AGRICULTURAL IMPLEMENT DEALERS,
notes taken for sales, 108
ALLOWANCES GRANTED TO CUSTOMERS, 553–556
AMERICAN BANKERS' ASSOCIATION,
endorse certified accounts, 34
financial statement, form of, 378–380
AMERICAN INSTITUTE OF ACCOUNTANTS,
auditing procedure memorandum, 61
condensed income account, 408
members suspended for failure to state amounts due correctly, 99
rules for professional conduct, 12
AMERICAN MALTING COMPANY,
(Hutchinson *vs.* Curtiss), 146, 293, 522
liability of directors, 671–677
AMORTIZATION,
fund for depreciation, 628
of bonds, 203, 583
ANNUITY SYSTEM FOR DEPRECIATION OF LEASEHOLDS, 646
APPRECIATION,
cannot offset depreciation, 457
included in costs, 140
value of assets, 321
ASSETS,
analysis of, 73
appreciation of, to offset depreciation, 457
capital,
carried at cost, 323
sale of, 280, 457
changes in, 343
classification of, 73, 76–79
contingent, 213
current,
accounts receivable, 89–107
accounts receivable not included as, 153
business insurance, 113
cash, 85–89
cash deposits as security, 106
deferred charges, 115
defined, 75
fictitious accounts, 100
foreign branches, 69
investment securities not, 111
investments, temporary, 114
Liberty bonds, 112
liens on, 79
net, 79
notes receivable, 107–116
postage stamps, 115
ASSETS—*Continued*
current—*Continued*
pre-paid items, 115
ratio of, to other liabilities and capital, 82
schedule of, 76
securities as stock-in-trade, 111
writing down of, 130
detailed audit of, 581–599
fixed, 173–220
arrangement of, on balance sheet, 178
bonds, 205
book value, determination of, 178
containers, 187
copyright, 194
defined, 173
electrotypes, 190
foreign branches, 69
funds and other permanent investments, 203
furniture and fixtures, 187
good-will, 195–200
horses, 188
in leased premises, 187
income from sale of, 320
intangible, schedule of, 78
investment securities are, 111
investments of reserves, 202
leaseholds, 183
machinery and equipment, 185
methods of aiming at valuation, 177–179
mines, 212
mortgages, 205
patents, 190–193
patterns, drawings, etc., 189
plant accounts, analysis of, 175–177
real estate, 179–184
secret reserves, 214–220
sinking funds, 200
stock, 206–209
timber land, 212
tools, 187
treasury stock, 206–208
wagons, automobiles, etc., 189
wasting assets classed as, 209
fixed tangible,
schedule of, 77
inflation of, 129
listed on consolidated balance sheet 341
miscellaneous schedule of, 78
on balance sheet, 71–84
sale of, 457
tangible,
defined, 174
net tangible defined, 175

ASSETS—*Continued*
valuation, 74
appreciation of, 321
in making investigations, 426
liquidating partnership, 465
wasting,
depreciation, 653
dividends of mining company, 295
valuation, 209–213
ASSIGNMENTS,
of accounts receivable, 80
AUDITING,
business man's attitude, 2
distinguished from accounting, 1
profession of, 6
AUDITOR,
action of, when assets are wrongly valued, 219
and client,
agreement with client definitely fixed, 40
co-operation of, with client, 41
criticism of auditor, 54
distinctions of methods should be discussed, 72
instructions from client to auditor, 424
legal status and responsibility of each, 39
not ethical for one auditor to supplant another, 54
procedure when supplanting another auditor, 54
relation of auditor to staff of client, 41
relation between, 39
restrictions on use of reports, 418
as efficiency engineer, 601
as expert witnesses, 428–432
ethics of, 9–17
experience and training of, 5
familiarity with various lines of business, 52
fees, 43–46
good system necessary to, 48
incompetent, 7
knowledge of negotiable instruments law, 235
legal decisions concerning, 7–17
legal duty as to inventories, 154
legal ethics and liabilities, 7, 9–12
liability for report, 359
liability in making forecasts, 435, 449
restrictions on rights to examine books, 669
should express opinion, 33
tact when making report to client, 42
AUDITS (See also "Balance Sheet Audits," "Detailed Audits"; "Investigations"; "Reports")
AUDITS—*Continued*
advantages of, 29–38
as a proof of condition of affairs, 30
in fire loss, 35
in partnerships, 34
in recovery for negligence, 38
in sale of business, 37
to public service corporations, 37
to secure bank loans, 33
to secure surety, 35
to stockholders and the public, 36
compared to investigations, 423
completed, 491
contingent liabilities, 54
continuous, 491
detailed or balance sheet, 55
detection of errors, 23–28
detection of fraud, 21–23
made without notice to cashier, 87
payment for, by client, 39
prior, 54
promptness in completing, 29
proper authority for making determined beforehand, 39
publicity of, 36
purposes of, 18–28
voucher method, 57
where made, 46
written agreement before making, 40
AUTOMOBILES,
depreciation, 650
valuation, 189
AVERAGE COST, 135
AVERAGE, WEIGHTED, 138

B

BAD DEBTS,
accounts receivable, 90, 580
notes receivable as, 250
on income account, 313
purchase of accounts receivable, 79
reserves for, 251, 314
writing off, 94, 314
BALANCE SHEET (See also "Balance Sheet Audit"; "Consolidated Balance Sheet")
adjusted to new capital, 376
as a basis for bank loans, 32
as an aid in verifying income, 518
assets and liabilities compared, 374
Forms, 375
Cleveland Clearing House Association, 374
condensed *vs.* detailed, 371
construction of, 271
contingent liabilities listed on, 371

BALANCE SHEET—*Continued*
date of,
liabilities created after, 249
on certificate, 364
prices after closing, 150–152
transactions occurring after, 54
debts subordinated, 224, 376
distinction between liabilities and net worth, 269
Federal Reserve Board,
Form, 370, 372–373
Federal Reserve Board recommendations, 61, 72
forms of, 365–381
holding company, 97
influence of excess profits on, 31
influence of trade conditions on, 152
interdepartmental or intercompany profits, 152
no-par value stock on, 374
omitted items, 250
precautions against separation of sheets of, 365
reserves segregated from surplus, 268, 374
surplus groupings on, 280, 374
value of, to banker, 221
verification of, 29
BALANCE SHEET AUDIT, 58, 71
accounts receivable, 89–107
advances or purchase of, 79
from affiliated companies, 97–99
assets,
classification of, 73, 76–79
fixed, 173–220
(for full entries see "Assets, fixed")
schedule of, 76–79
valuation of, 73
book value *vs.* actual values, 175
capital stock, 271–278
cash, 85–89
compared to detailed audit, 491
contingent liabilities, 247–266
(for full entries see "Liabilities, Contingent")
costs on, 135–144
current assets, 75, 116
net current assets, 79
ratio of, to other liabilities, 82
verification of, 79
expenses, 324
Federal Reserve Board proposal, 61, 72, 681–705
fictitious accounts, 100
general principles, 71
gross income on, 311
income account, 290–334
BALANCE SHEET AUDIT—*Continued*
income account—*Continued*
(for full entries see "Income account")
importance of, 303
inventories, 117–172
rules for verifying, 162–167
variations in, 132
investments at amortized values, 203
liabilities, 80, 221–266
(for full entries see "Liabilities")
liens, 79–81
limitations of, 72
losses, 324
notes receivable, 107–116
or detailed audit, consideration of, 55
overdrafts on bank balance, 89
period to be covered, 175
petty cash fund, 87
reserves, 267–271
surplus, 278–289
valuation,
method of arriving at, 177–179
rule for, 159
BANK,
account,
balancing of, 502–509
branch office, 68
"canceled" cheques, fraud in, 508
checking of, 63
cheques not returned, 509
deposits credited at a later date by bank, 505
deposits should be made daily, 501
errors by bank clerks, 563
examination of, 504
examination of indorsements, 506
examination of statement or pass-book, 509
interest on, 457, 530
money borrowed to pay deficient, 87
monthly reconciliations, 63
negligence of depositor, 505
overdraft on, 89
reconciliation of, 508
reconciliation of, with cash receipts, 509
verification, 85, 502–509
certified accounts endorsed by, 34
contingent liabilities, 259
investigations for credit, 470–473
negligence of, 507
reports for, 353
statements,
examined before filing, 504
monthly, 504
of assets and liabilities from borrowers, 377
verification of, 503

BANK CHECKS (See "Cheques")
BANK LOANS (See "Loans")
BANKRUPTCY,
  causes of, 479
  investigations after, 473
BANKS,
  time figured on interest, 658
"BASE" STOCK METHOD OF INVENTORY, 125
BILL,
  certified as evidence of payment, 540
  rendered by branch office, 68
BLUE-SKY LAWS, 302
BONDS,
  amortization of, 203, 583
  as liabilities, 236
  audit of, 598
  discount,
    as a deferred charge, 573
  examination of bond ledger, 598
  interest on, calculation of, 663
  mortgage, 205
  of subsidiary on consolidated balance sheet, 341
  premiums received on, 583
  reserves for retiring, 286
  sinking fund for, 632
  surety,
    for employees, 35, 459, 557
  valuation, 205
BOOK VALUE,
  as basis for actual, 175
BOOKS OF ACCOUNT,
  auditor should have list of all, 515
  director's right to inspect, 667, 669
  efficiency of, 602
  erasures in, 603
  loose-leaf, 603
BRADSTREET COMPANY STATEMENT FORM, 398–401
BRANCH ACCOUNTS,
  current assets, 69
  detailed audit of, 585
  fixed assets, 69
  foreign, 69
  internal,
    check for, 67–70
BUILDING CONSTRUCTION,
  costs, 588
  interest paid on borrowed money for use in, 589
  on leased land,
    depreciation of, 646
  profit not included in costs, 589
  rate-making, 590
  salaries of manager or superintendent, 592
BUILDINGS,
  demolished,
    depreciation on, 645
  depreciation, 644
  valuation, 179–184
BUSINESS,
  good practice and accounting, 125

C

CANADA,
  legal requirements for reports, 420
CANCELLATION OF ORDERS, 261, 312, 319
  effect of, on inventory values, 160
CAPITAL,
  distinct from liabilities, 223
  distributions of, from contributed surplus, 295
  dividends not paid out of, 292
  expenditures, 585
  invested,
    changes in, 344
    valuation of, 344
  new,
    adjusted on balance sheet, 376
  payment, 585
    cash discounts on, 587
  profits,
    defined, 309
  ratio of merchandise to, 82
  receipts from, not included in income account, 291
  sufficient, 450
  working,
    reserve for, 287
CAPITAL STOCK,
  audit of,
    detailed, 597
    procedure, 273, 584
  balance sheet audit, 271–278
  converted into bonds, 259
  dividend,
    reserve fund for, 288
  no-par value, 274–277, 374–376
  of subsidiary, on consolidated balance sheet, 341
  premiums, 278, 583
  statutory liability of stockholders, 213
  transfer of, 277
  unissued, 208
  unpaid subscriptions not notes receivable, 110
  value of assets paid in for, 273
CAPITAL SURPLUS, 279
CASE, J. H., ON CONSOLIDATED BALANCE SHEETS, 339
CASH,
  audit of alone, not sufficient, 56

CASH—*Continued*
book,
discounts verified in, 523
falsification of, 510, 512
reconciliation with bank book, 86
deposits,
as security, 106
deposits in bank,
checking methods, 63
money borrowed to complete balance, 87
verification of, 85
discount,
on capital payments, 587
reserves for, 90, 332
treatment of, 532
verification of, 523
in transit,
verification of, 89
memoranda, 88
payments,
postings of, 513
verification of, 512
petty,
branch office funds, 68
verification, 63, 87
vouchers for disbursements, 63, 546
receipts,
falsification of, 510
from sales, 517
verification through bank deposits, 509
remittances by mail,
should be listed, 63
verification of, 85–89
CASHIER,
audit of petty cash fund, 63
bonding of, when books are audited regularly, 35
no access to certain accounts, 63
CERTIFICATES, 360–365 (See also "Reports")
date of,
"as of" date of balance sheet, 364
transactions occurring after date of balance sheet and before, 54
forms, 361–364
should not contain forecasts, 450
with reservations, 133
CERTIFIED ACCOUNT,
as a basis for bank loan, 33
endorsed by American Bankers' Association, 34
publicity of, 36
CHECK SYSTEM,
internal,
bank balances, 63
bank deposits, 63
CHECK SYSTEM—*Continued*
internal—*Continued*
branch offices, 67–70
cash remittances, 63
cheque payments, 63
collections, 66
customer's accounts, 66
incoming mail, 63
inventory of stock, 67
method of auditing depends upon, 62
pay-rolls, 66
petty cash fund, 63
purchases, 64, 542
sales invoice, 66
stock records, 67
transportation charges, 64
vacations and transfer of employees 67
vouchers, of branch office, 68
CHEQUES,
bank,
all payments by, 513
arrangement of vouchers for auditor, 62
"canceled," fraud in, 508
control of issuing, 63
illegal uses of, 501
falsification of, 512
in transit, 89
indorsements examined, 506
not returned, 509
on report, 417
outstanding at closing date, 63, 86
verification of, 512
vouchers, 63, 539
CLERKS,
checking work of, 494
scheduling of, 53
CLEVELAND CLEARING HOUSE ASSOCIATION, BALANCE SHEET FORM, 374
CLIENT (See "Auditor and client")
COLLATERAL,
cash deposits as, 106
information concerning not alone sufficient, 471
liens, 79
COLLECTIONS,
falsification of receipts, 524–528
fees charged by bank, 563
from rentals, 530
internal,
check for, 66
not accounted for, 518, 524–528
COMMERCIAL PAPER,
rediscounts, 339
COMMISSIONS, 242
goods sold on, 520
salesmen's, 559

COMMITMENTS,
careless, 253
for future delivery, 259–263
COMPETITION,
considerations of, 454
COMPLETED AUDIT, 491
CONCEALMENT OF LIABILITIES, 233
CONDEMNED PROPERTY, 455
CONFIDENTIAL INFORMATION,
restrictions on client's use of reports, 418
secured from competitor, 435
CONSIGNMENTS,
fraud in goods sent on, 442
goods received on, 520
in inventory, 164
insurance on, 520
liabilities for goods received on, 232
profit on goods sold, 312, 521
verification of, 519
CONSOLIDATED BALANCE SHEET, 335–347
bonds of subsidiary, 341
book values for shares purchased, 346
capital stock of subsidiary, 341
changes in invested capital, 343
Form, 340
guaranties of subsidiaries' obligations, 347
majority interests acquired, 343
minority interests shown on, 341
rediscounts, 339
CONSOLIDATED INCOME ACCOUNT, 347–351
CONSTRUCTION (See "Building construction")
CONTAINERS,
refunds for return of, 188, 555
valuation, 187
CONTINGENT ASSETS (See "Assets, contingent")
CONTINGENT LIABILITIES (See "Liabilities, contingent")
CONTINUOUS AUDIT, 491
CONTRACTS,
future,
contingent liabilities for, 259
losses in, 260, 461
instalments due on, 102, 590
CONTROL (See "Check system")
CONTROLLING ACCOUNTS (See "Accounts")
CONYNGTON, THOMAS, ON DIVIDENDS, 293
COPYING METHODS, 615
COPYRIGHT,
depreciation, 652
royalties, 462
valuation, 194
CORPORATIONS,
liabilities of directors, 665–677
minute book as source of information, 264, 665
COST,
accounting system, aid in auditing, 169
adjustment to value, 144
allocation of, 569
appreciation included in, 140
arbitrary methods of finding, 139
average, 135
book *vs.* market, 160
current operating,
assets partly chargeable to not fixed, 174
defined, 135
does not include profit, 171
interest not an element in, 155–158
inventory at, 134, 138, 159
methods of finding, 139
replacement, 142, 160
replacements, at date of balance sheet, 141
reproduction, at date of inventory, 141
rules for valuation at, 159
specific purchases on hand, 137
use of values instead of costs, 140
when market is higher than, 144
COST OR MARKET,
fundamental error in, 150
value of inventories, 126–131
COUPONS, 244
CREDIT,
extension of,
based on balance sheet, 225
by banks, assisted by audit, 33
collateral *vs.* personal integrity, 471
investigation for, 470–490
(for full entries see "Investigations")
for allowances and returns, 553–556
National Association of Credit Men's rules, 478
CREDIT DEPARTMENT, 313
CREDIT MANAGER,
procedure when extending credit, 477
CREDIT REPORTS, 377–404
Bradstreet Company, 398–401
Dun, R. G., and Company, 402–404
Federal Reserve Board, 386–392
Irving National Bank, 382–385
National Association of Credit Men, 394–397
CREDITORS,
omitted on report, 417
statements from, 62, 228
CUBA, MORATORIUM IN, 93
CURRENT ASSETS (See "Assets")
CUSTOMERS,
accounts,
internal check, 66
verification of, 511, 525
credit given to, verification of, 553–556

CUSTOMS DUTIES,
charges in inventory, 164
payment of, 563

D

DAMAGES,
claims for, 243
not contingent liabilities, 248
DATE,
of balance sheet, transactions occurring after, 54, 150, 249
of certification, transactions occurring before, 54
of detailed audit, auditor's responsibility prior to, 495
DEBTORS, OMITTED ON REPORT, 417
DEBTS (See also "Bad debts," and "Liabilities")
subordinated, on balance sheet, 224, 376
DECISIONS,
American Malting Company (Hutchinson *v.* Curtiss), 146, 293, 522
Cliquot's Champagne (Muser *v.* Magone), 131
depreciation, People *ex rel.* Jamaica Water Supply Co. *v.* State Board of Tax Commissioners, 622
forgery,
Farrell *et al. v.* First National Bank of Philadelphia, 507
Los Angeles Investment Co. *v.* Home Savings Bank of Los Angeles, 507
Pomona Building and Loan Association *v.* West Side Trust Co. of Newark, 507
in re Kingston Cotton Mill Co., 154
Irish Woolen Co., Ltd., *v.* Tyson and others, 545
legal responsibility,
East Grand Forks *v.* Steele, 11
Smith *v.* London Assurance Corporation, 12
net income, 306–308
patents,
Am Ende *v.* Seabury, 486
Rubber Co. *v.* Goodyear, 486
DEDUCTIONS,
from gross income, 311–314
from income account, 324
DEEDS OF TRUST,
net current assets, 79
no limitations placed on conversion period of inventories, 153
DEFALCATION (See "Embezzlement")
DEFERRED CHARGES,
absorption of, 446
DEFERRED CHARGES—*Continued*
advertising, 576
allocation of, 569
bond discount, 573
charges to operation, 115, 522
doubtful items, 574
instalment accounts, 102
organization expenses, 576
DEPARTMENT STORES,
purchase invoices, 65
DEPARTMENTS,
distribution of profits among, 317
DEPLETION, CALCULATION OF, 210
DEPOSITS,
from customers, 244
interest time figured on, 658
DEPRECIATION (See also "Valuation")
allowance for, on income account, 326–328
auditor's judgment concerning, 635
automobiles, 650
buildings, 644
demolished, 645
New York State ruling, 645
cannot be offset by appreciation, 457
causes of, 624
copyright, 652
cost basis for, 634
defined, 621
effect of income tax on, 623
equipment, 647
fixed assets, 173, 622
fixed percentage basis, 627
fluctuations in, 621
furniture and fixtures, 649
good-will, 652
horses and animals, 650
in book value of property, 178
land, 638, 643
leaseholds, 646
machinery and equipment, 647
maintenance, 625, 647
methods of calculating, 626
mines, 653
new buildings on leased land, 646
obsolescence, 637
operating expense, an, 634
patents, 652
production method, 631
proper provision for, 31
rate tables, 639–643, 648–649
repairs, 625
reserves, 285, 409
buildings, 183
in book value of property, 178
investment of, 636
machinery and equipment, 185
theory of, 622

DEPRECIATION—*Continued*
ships, 651
sinking fund for *vs.* fund for bond retirements, 632
sinking fund method, 628–631
small tools, 649
tables, 639–643, 648, 649
timber land, 654
wagons, 650
wasting assets, 653
DETAILED AUDIT,
accrual method used, 495
asset, 581–599
auditor's responsibility for prior date, 495
bank account, verification of, 502–509
cash discounts, 523
cash payments, 512
cash receipts, 509–512
certified bills as evidence, 540
cheques received, 501
choice of, and balance sheet, 55
collections not accounted for, 518, 524–528
compared to balance sheet audit, 491
completed audit, 491
continuous audit, 491
credit for allowances and returns, 553–556
discount for prepayment, 532
expenditures, verification of, 538–577
footings and postings, 496
fraud connected with receipts, 515
general principles, 491–514
income,
from corporation's own securities, 536
from investments, 528–532
verification of, 515–537
interest receivable, 529
interim reports, 492
investments, income from, 528–532
liabilities, 581–599
manipulation of accounts, 492
memorandum books examined, 516
notes payable, 593
original records compared with final, 516
payments, verification of, 538–577
petty cash, 546
purchase records, 498
purchases, 541–546
realizations from items previously charged to income, 534
rents receivable, 530
repairs and renewals, 551
sale of building lots, 535
sales records, 499
sales, verification of, 516–528
services and other charges billed in advance, 536
DETAILED AUDIT—*Continued*
subdivision of time to kinds of work, 497
trial balance, 578–581
forced, 498
vouchers, verification of, 538–551
wages and salaries, 556–563
when should be made, 56
DEVELOPMENT WORK,
expenses for, 575
DICKINSON, SIR A. LOWES,
income account form, 407
on reorganization, 468
DIRECTORS OF CORPORATIONS,
cannot confer unlimited rights on auditor 669
dealings with company, 665
liabilities of, 214, 665–677
right to inspect books, 667–669
salaries and compensation, 667
DISCOUNT,
acceptances, 257
bond, 573, 583
cash,
allowance for, 332
in inventory, 164
on capital payments, 587
reserves for, 90
treatment of, 532
verification of, 523
classes of, 532
deducted from bank balance, 563
liabilities for, 231
notes payable, 234
notes receivable, 109, 250
trade,
allowance for, 331
treatment of, 533
"DISCOUNT" COMPANIES,
purchase of accounts receivable, 80
DIVIDENDS,
American Malting Company, 294
audit of, 595
Conyngton on, 293
English Companies Act, 294
from net income, 333
Interborough-Metropolitan Company, 294
legal decisions of net income, 305
net income distributed in, 295
New York Corporation Law, 293
not paid from capital, 292
paid out of revenue profits, 322
preferred stock, 595
reserves for, 288
stock, 277, 596
unclaimed, 246

DOING BUSINESS,
cost of, deducted from net income, 324
DRAWINGS, DESIGNS, ETC., VALUATION, 189
DUN, R. G. & COMPANY,
statement form, 402–404

E

EARNINGS (See also "Income account," "Revenue profits")
current,
items not included as, 458
EAST GRAND FORKS *v.* STEELE, DECISION ON LEGAL RESPONSIBILITY OF AUDITOR, 11
ECONOMIES INVESTIGATED, 452
EFFICIENCY OF ORGANIZATION, 620
ELECTROTYPES, VALUATION OF, 190
EMBEZZLEMENTS, 459, 486
cannot be found by verification of vouchers alone, 57
discovered by use of charts, 416
losses due to, as contingent liabilities, 248
EMPLOYEES,
accounts receivable from, 99
bonding of, 35, 459, 557
records, 66
vacations, 67
wages should be paid in presence of witnesses, 67
ENGLAND, LEGAL REQUIREMENTS,
for reports in, 420
EQUIPMENT,
depreciation for, 647
depreciation tables, 648, 649
valuation, 185
ERASURES IN BOOKS OF ACCOUNT, 603
ERRORS,
causes of, 479
clerical, 24
detection of, 23–28, 463
of commission, 26
of omission, 25
of principle, 23, 482
offsetting, 27
ESTATES, DIVIDENDS OF, 275
ESTIMATES,
auditor's liability in making, 435, 449
use of, in figuring profit, 316
ETHICS,
for auditors, 9–17
misleading advertisements, 419
removal of auditor for another not usual, 54
restrictions on use of reports, 418
rules for, in U. S., 15
ETHICS—*Continued*
rules of American Institute of accountants, 12
rules of, Institute of Chartered Accountants, 14
EXAMINATIONS (See "Investigations")
EXCESS PROFITS TAX,
as a factor in preparing correct balance sheet, 31
Treasury ruling on instalment accounts, 103
EXPANSION OF BUSINESS NECESSITATES CREDIT, 470
EXPENDITURES (See also "Purchases")
capital, 585
construction costs, 588
improvements and extensions, 590
machinery, 592
maintenance and construction accounts, 586
partners' withdrawals, 594
real estate, 588
repairs and renewals, 551
salaries account, 592
EXPENSES,
advertising, 576
allocation of, 569
collection charges, 563
credit for allowances and returns, 553–556
current,
as current assets, 115
customs duties, 563
decreases in, 445–449
deferred charges, 569–577
depreciation considered as, 634
experimental and development work, 575
freight and express, 566
insurance premiums, 564
interest charges, 563
legal and "graft," 568
organization, 174, 576
postage, 566
purchases, verification of, 538–551
salesmen's, 559
verification of, in detailed audit, 538–577
wages and salaries, 556–563
EXPERIMENTAL WORK, EXPENSES FOR, 575
EXPORT SALES, COLLECTION OF ACCOUNTS IN, 104
EXPRESS EXPENSES, 566

F

FAILURES (See "Bankruptcy")
FEDERAL RESERVE BOARD,
audit program for balance sheet method, 61, 72

FEDERAL RESERVE BOARD—*Continued*
financial statement, 386–392
inventory recommendations, 135
proposal for uniform accounting, 679–705
FEDERAL TRADE COMMISSION INQUIRY BLANK, 358
FEES, 43–46, 242
FICTITIOUS ACCOUNTS, 100
FILES,
for working papers, 50
indexing scheme for, 51
systems, 613
FINANCIAL STATEMENTS,
bank requirements, 377
Federal Trade Commission requirements, 358
forms,
American Bankers' Association, 378–380
Bradstreet Company, 398–401
Dun, R. G. and Company, 402–404
Federal Reserve Board, 386–392
Irving National Bank, 381–385
National Association of Credit Men, 394–397
investigation of, 470–490
(for full entries see "Investigations, credit extension")
required by banks, 377, 470–473
required by credit managers, 393, 477
value of audit for ascertaining true condition of affairs, 30
FINISHED GOODS,
inventory valuations, 142, 170
profit from, 314
FINNEY, H. A., QUOTED, 69, 99
FIRE LOSS,
advantages of an audit in adjustment of, 35
collection of, 300
not insured, 459
FIXED ASSETS (See "Assets, Fixed")
FIXED PERCENTAGE BASIS FOR DEPRECIATION, 627
FIXED PERCENTAGE BASIS FOR PROFIT, 316
FIXTURES,
depreciation for, 649
valuation, 187, 467
FLOY, HENRY, ON DEPRECIATION, 625
FOOTINGS,
verification of, 496
FORECASTS, AUDITOR'S LIABILITY IN MAKING, 435, 449
FOREIGN BRANCHES, CONTROL OF, 69–70
FOREIGN EXCHANGE, 104
factor in foreign branch accounts, 69
FOREIGN SALES,
collection of accounts, 104
FORGERY, 428, 489
FRAUD,
bank accounts, 502–509
cash discounts, 523
cash payments, 512
cash receipts, 509–512
detection of, 21, 482, 486–490
fictitious accounts receivable, 100
forgery, 428
inflation of sales, 442
inventory understatement, 123
marking of falsified entries, 428
methods of defalcation, 515
purchases, 543–546
through false postings and footings, 496
under or over-valuation of assets, 214–220
unrecorded notes payable, 594
FREIGHT,
allowance for liabilities, 242
charges in inventory, 164
expenses, 566
FUNDS (See "Sinking funds," "Reserves")
FURNITURE,
depreciation for, 649
valuation, 187
FUTURE DELIVERY,
cancellation of orders, 261, 312, 319
contingent liabilities, 259
deferred charges to operation, 522
income from sales, 319, 519, 521

G

GAS, BILLS PAYABLE, 241
GOOD-WILL,
depreciation, 652
earning power of, 195
International Harvester Company, 198
valuation, 195–200
chart for computing, 199
formula for determining, 197
GOODS,
finished,
inventory of, 142, 170
in process,
inventory of, 169
on consignment,
in inventory, 164
receipt of, 232
GRAFT, 568
GRAPHIC CHARTS, 410–417
GROSS INCOME,
appraisal of net value, 268
deductions from, 311–314
defined, 299
on balance sheet, 311
returned goods deducted from, 311

GROSS INCOME—*Continued*
verification of,
on investigation, 438
GUARANTY, INDORSEMENT FOR, 255

H

HOLDING COMPANIES,
amounts due from affiliated companies, 97–99
consolidated balance sheet, 337–347
consolidated income account, 347–351
rediscounts, 339
HOME OFFICE CONTROL OVER BRANCH, 67–70
HONESTY IN BUSINESS, 471, 483
HORSES,
depreciation for, 650
valuation, 188
HYPOTHECATIONS (See "Liens")

I

IMPROVEMENTS, 586, 590
INCOME (See "Gross income," "Net income")
INCOME ACCOUNT,
advances and deposits collected in advance, 522
allowance for,
depreciation, 326–328
obsolescence, 329
analysis of, on investigations, 438–449
anticipated profits, 315
apportionment of, in liquidating partnerships, 466
bad debts, 313
cancellation of orders, 311
capital profits *vs.* revenue, 309
cash discounts, 523
cash receipts, 509–512
collections not accounted for, 518, 524–528
comparative statement, 440
complete investigation of all sources, 515
completed *vs.* incompleted transactions, 314
consignments, 312, 519–521
consolidated, 347–351
contributed surplus, 295
deductions from gross income, 311–314
detailed audit, 494–537
discounts, 331
discounts for prepayment, 532
dividends,
not paid from capital, 292
of estates, 295
of mining company, 295
INCOME ACCOUNT—*Continued*
effecting good-will, 195
expenses, 309, 324
expenses accrued, 330
fire losses, 300
form of, 291, 406–409
American Institute of Accountants, 408
Dickinson, 407
importance of, 303
includes transactions for given period, 495
interest should not be paid out of reserves, 409
investments, 528–532
corporation's own securities, 536
losses, 324
net income, 300–310 (See also "Net income")
order for future delivery, 319, 519, 521
profits on fluctuations, 445
reading of, 297
realizations from items previously charged to income, 534
rentals, 530
revenues, 311–323 (See also "Revenue profits")
sale of building lots, 535
sale of treasury stock, 292
sales, verification of, 442, 516–528
subscriptions or sale of regular services, 536
terminology in, 296
turnover, calculation of, 444
variations in arriving at conclusions of, 303
verification of,
by use of balance sheet, 518
in balance sheet audit, 290–334
in detailed audit, 515–537
INDORSEMENTS,
acceptances, 256
accommodation, as liabilities, 251–255
bank cheques, examination of, 506
careless commitment, 253
guarantees suretyship, 255
notes payable, 594
secured, 252
INFLATION, EFFECT ON INVENTORIES, 124
INSTALMENT ACCOUNT, 102
contracts in progress, 590
new machinery purchased, 592
sale of building lots, 535
stock sold on, 274
Treasury Department ruling, 103
INSTITUTE OF CHARTERED ACCOUNTANTS, RULES, 14
INSURANCE,
business, 113

INSURANCE—*Continued*
charges in inventory, 164
fire, on furniture and fixtures, 187
investigation of, 481
losses through lack of, 459
on consignments, 520
policies guide to clear titles, 79
premiums on, 241
profit from, not current earnings, 458
verification of payments, 564
INTEGRITY, 471
INTERBOROUGH-METROPOLITAN COMPANY, 294
INTEREST, 655–664
compound, 657
from reserves, not good practice, 409
not an element of cost, 155–158
on accounts in arrears, 656
on bank balances, verification of, 563
on bonds and mortgages, 663
on money borrowed for construction cost, 589
payable, 235, 239
principal, 655
rate, 657
notes receivable, 532
on securities, 531
receivable, 529
bank deposits, 457, 530
time of running, 658–662
bank customs, 658
commercial customs, 650
New York Clearing House customs, 661
New York Stock Exchange customs, 661
stock-brokers customs, 660
unit period, 662
United States Treasury rulings, 661
INTERIM REPORTS, 492
INTERNAL CHECK SYSTEM (See "Check system, internal")
INTERNATIONAL HARVESTER COMPANY, GOOD-WILL, 198
INVENTORY,
accounts receivable, 120
calculations and footings, verification of, 167
cash discounts, 164
comparison of inventory prices with current purchases, 164
conversion period, 153
cost of goods, 135–144
detailed audit of, 582
duty charges, 164
effect of abnormal conditions on, 117–122
excessive valuations, 216
INVENTORY—*Continued*
Federal Reserve Board's recommendations, 135
finished goods, 142, 170
fire loss, 35
freight charges, 164
goods in process, 169–170
goods sold *vs.* goods unsold, 160
in figuring turnover, 444
insurance charges, 164
intercompany or interdepartmental profits eliminated from, 152
interest not an element of cost, 155–158
"inventory at cost," defined, 134
legal duties of auditors concerning, 154
mark up, 617
methods of valuation,
"base" stock methods, 124, 125
basis of valuation should be disclosed, 124
cost finding, 135–144
cost or market, 122, 126–131, 159
cost segregated from increment in value, 166
discussion, 122–150
evolution of rules, 133
in a falling market, 141–144
influences of trade conditions on, 152
less than cost, 124
prices after closing date, 150–152
prior to 1917, 134
reduced to replacement costs, 142
selling price, 147–150
stock not converted into cash within one year, 153
uniform practice in, 139
variations in, 132
writing up values, American Malting Company case, 146
perpetual, 67
branch office, 68
physical compared with book entries, 163
purchases to fill outstanding orders, 168
raw material, 124, 125, 137, 168
reserves for, 120, 125, 129
revaluations as of March 1, 1913, 140
securities, 111
segregation of stock not convertible within one year, 153
sheets,
inspection of, 165
original, to be verified, 162
used by auditor, 62
stock-taking, verification of, 162
stores system, 615
supplies, stores, etc., 172
Treasury rulings, 121

INVENTORY—*Continued*
understatement of values, 123
value at date of balance sheet, 126
value not cost the criterion, 144
valuation liquidating partnership, 466
valuations during 1919 and 1920, 129–131
verification of, 162–169, 448
when market price is higher than cost, 144–147
when reproduction cost is higher than replacement cost, 141–144
INVESTIGATIONS (See also "Audits"; "Reports")
assets, valuation of, 426
bank loans to be repaid, 473
bankruptcy, 473–476
causes of, 478–481
based on definite facts, 427
collateral *vs.* integrity, 471
compared to audit, 423
credit extension, 470–490
auditors *vs.* credit managers, 477
for bankers, 470–473
inaccuracies on financial statements, 479
insurance, 481
judging a good risk, 481
lack of capital, 480
National Association of Credit Men's rules, 478
procedure of credit manager and auditor, 476
credit manager *vs.* auditor, 477
criticisms should be avoided when making, 455
data on future business, 472
defined, 423
details which may be omitted, 426
errors of principle, 482
forecasts, liability for making, 435
fraud, 482, 486–490
handling books and records, 427
into method of doing business, 479
patent litigation, 484
personal element, 471, 483
public service corporations, 463
reorganizations, 468
sale of business,
accounts from books or special compilations, 436
accounts receivable, 466
adjustments and qualifications, 460
advertising and deferred charges, 446
analysis not audit is required for, 437
apportionment of profits and losses, 467
capital requirements, 450
competition as an element, 454
INVESTIGATIONS—*Continued*
sale of business—*Continued*
damages, condemnations, etc., 458
deferred charges, 446
earnings and expenses, 438–449
earnings of future net income, 457
economies offset to pay for extravagences, 452
elimination of unusual items, 456
embezzlements, 459
errors in books, 463
expenses, 446
extraordinary items, 456
fire and other losses not insured, 459
forecasts or probable estimates, 449
fraud in sales, 442
future contracts, 461
good management, 453
gross income, 438
income from assets not taken over, 457
interest on deposits, 457
insurance profit, 458
inventories, 448
lawsuits, 460
leases, 447
liquidating partnerships, 465–468
machinery and fixtures, 467
new accounting system, 455
net income, 439
old accounting system, 455
partners' salaries, 460
period after closing date, 444
period covered, 437
personal element in, 453
profits on fluctuations, 445
public service corporations, 463
requirements, 433
requirements, future, 449
reserves, excessive, 458
royalties, 462
sale of assets, 457
sales, 442
special losses or expenses, 458
stock-in-trade, 466
taxes, 462
test required, 464
turnover calculation of, 444
valuations variations in, 434
statistics, use of to auditor, 435
use of previous audits in, 426
working papers, 425
INVESTMENTS,
bonds secured by mortgages, 205
depreciation reserves, 636
effect of market price on surplus funds 203
income from, 528–532

INVESTMENTS—*Continued*
low interest bearing securities, 531
of funds, 203
of reserves, 202
of surplus, 289
permanent, 203
securities are fixed assets, 111
temporary, 114
INVOICES,
duplicate, 64
payment of, 65
purchases, verification, 64, 541–546
register, 65
sales, internal check, 66
suppressed, 229
verification of, in inventory, 164
IRISH WOOLEN CO. LTD., *v.* TYSON AND OTHERS, 545
IRVING NATIONAL BANK, FINANCIAL STATEMENT, 382–385

J

JOURNAL VOUCHERS, VERIFICATION OF, 549
JUDGMENTS AWARDED, INCLUDED IN BALANCE SHEET, 213, 238

K

KINGSTON COTTON MILL COMPANY, 165

L

LAND,
depreciation, 638, 643
sale of building lots, 535
valuation, 181–182
LAW (See also "Decisions")
auditor as witness, 428–432
auditor's duties as to inventories, 154
decisions concerning auditors, 7–17
fixing legal status of client before work is commenced, 39
negligence of auditor to discover fraud in purchases, 545
negotiable instruments, 235
net income, 305
patent litigations, 484
rights of auditors under, 7
trend of legal decisions, 7
LAWSUITS, EXPENSES FOR, 460
LAWYER, ADVERTISING BY, NOT ETHICAL, DECISION, 15
LEAKE, P. D., ON DEPRECIATION, 691
LEASEHOLDS,
annuity system of writing off, 646
cash deposit as security under, 106
depreciation, 646
LEASEHOLDS—*Continued*
investigation of, 447
landlord's fixtures, depreciation for, 650
valuation, 183
LEDGER,
balancing of, 617
columnar, 619
individual, not accessible to cashier, 63
subsidiary, controlling, 619
verification by tests and scrutiny, 497
LEGAL EXPENSES, 242, 460, 568
LIABILITIES,
accounts payable, 225
audit fees, 242
auditors, 7, 73
bonds issued, 236
commissions, 242
concealment and deception of, 233
consignments, goods received on, 232
contingent, 247–266
acceptances, 256–258
banks, 259
bond, note and stock stipulations, as effecting, 263
capital stock converted into bonds, 259
classification of, 248
defined, 247
commitments leading to entanglements, 253
contracts for future delivery, 259–263
created after date of balance sheet, 249
guaranteeship, 255
indorsements, 251–259
listed on balance sheet, 371
litigations, 248
losses due to default, 248
minute book as source of information for, 264
notes receivable discounted as bad debts, 250
points involved in, 264–266
provision for, 54
suretyship, 255
unrecorded, 258
coupons, unused tickets, 244
damages, 243
deposits other than bank, 244
detailed audit, 581–599
determination of, 222
directors', 665–677
discounted notes payable, 234
discounts, 231
distinct from capital, 223
distinct from net worth, 269
dividends, unclaimed, 246
employees' profit-sharing plans, 243
freight allowance for, 242

LIABILITIES—*Continued*
interest payable, 239
interest rate on, 235
investigation of, 80
invoices suppressed, 229
irregular items, 229
items omitted, 228
judgment payable, 213, 238
legal expenses, 242
listed on consolidated balance sheet, 341
loans payable, 237
mortgages payable, 235
notes payable, 233–235
of client in making audit, 39
order and receiving books inspected, 230
premiums on insurance, 241
ratio of current assets to, 82
rent payable, 241
subordinated debts, 224
taxes payable, 239
tests for verifying, 230
trade creditors, 228
traveling expenses, 242
wages, accrued, 241
water and gas bills, payable, 241
LIBERTY BONDS, VALUATION, 112
LIENS, 79
on cash in bank, 86
on income account, 405
on real estate, 180
trust receipts, 80
LIQUIDATING PARTNERSHIPS, 465–468
LITIGATIONS AS CONTINGENT LIABILITIES, 248
LOANS,
bank,
certified accounts to secure, endorsed, 34
investigation to secure, 470–473
to be repaid, 413
value of audit for, 33
verification of interest charges on, 563
interest time on, 658
liens, 79
on accounts receivable, 79
rules governing, 237
LOCATION OF INDUSTRY, IMPORTANCE OF, 448
LOSSES,
arising from future contracts, 260
not insured, 459
of subsidiary companies, 351
reserves for, 461
transactions out of which they may occur, 248
LUMBER (See "Timber")

M

MACHINERY,
depreciation for, 647
purchases of, 592
valuation, 185, 467
MAIL,
handling of, 615
incoming,
cash remittances should be listed, 63
internal check, 63
MAINTENANCE,
charged against income, 551, 586
depreciation for, 625, 647
MAJORITY INTERESTS ON CONSOLIDATED BALANCE SHEET, 343
MANAGEMENT, ESSENTIAL OF GOOD, 32, 453
MANIPULATION OF ACCOUNTS, 492
MARK UP, 617
MARKET PRICE, 142
MARKET VALUE,
defined, 74
or cost, 126–131, 158
MARKS ON BOOKS AND RECORDS, 427
MECHANICAL DEVICES, 604–613
MEMORANDUM BOOKS, EXAMINATION OF, 516
MINES,
depreciation, 653
valuation, 212
MINING COMPANY, DIVIDENDS FROM NET INCOME, 295
MINORITY INTEREST ON CONSOLIDATED BALANCE SHEET, 341
MINUTES, BOOKS OF, 264, 665
MISAPPROPRIATION, 490
MORTGAGES,
bonds secured by, 205
interest on, calculation of, 663
payable, 235
MUSER *v.* MAGONE, 131

N

NATIONAL ASSOCIATION OF CREDIT MEN,
on granting of credit, 478
statement form, 394–397
NEGLIGENCE,
auditor, court decision, 11
claim for, recovered by means of an audit, 38
Irish Woolen Mill Co. Ltd., *v.* Tyson and others, 545
Kingston Cotton Mills Company, 165
of bank depositor, 505
of banks, 507
writing up values (Hutchinson *v.* Curtiss), 146

NET EARNINGS, USE OF TERM, 297
NET INCOME, 268
as affected by partners' salaries, 461
blue-sky laws, 302
deductions for taxes included, 301
deductions from, for cost of doing business, 324
defined, 300, 309, 406
by accountants, 308
economically, 308
legally, 305
dividends from, 333
future earnings, 457
legal decisions over, 306–308
relation to price-fixing, 304
surplus from, 333
treatment of, 302
verification of, in investigation, 439
NET PROFITS, USE OF TERM, 297
NET WORTH, DISTINCT FROM LIABILITIES, 269
NEW YORK CLEARING HOUSE, INTEREST TIME CALCULATION, 661
NEW YORK PUBLIC SERVICE COMMISSION, 628
NEW YORK STOCK CORPORATION LAW, 293
NEW YORK STOCK EXCHANGE, INTEREST TIME CALCULATION, 661
NOMINAL ACCOUNTS, VERIFICATION OF POSTINGS, 511
NO-PAR VALUE STOCK, 208, 274–277
on balance sheet, 374
NOTES PAYABLE, 233–235
detailed audit, 593
discounted, 234
indorsements, 594
schedule of, 62
unrecorded, 594
NOTES RECEIVABLE, 107–116, 582
accommodation indorsements, 251–255
as bad debts, 250
customs of trade, 107
demand notes, 108
discounting of, 109, 250
examination of, 107
interest accrued, 110
interest rate on, 532
out for collection, 107
overdue payment on, 108
partial payments on, 108
protested, 108, 582
schedule of, 62
segregation of items not collectible within reasonable time, 100
trade acceptances not, 109
trade accounts, 107
unmatured notes only, included as, 108
NOTES RECEIVABLE—*Continued*
unpaid subscriptions on capital stock not, 110
valuation, 107

O

OBSOLESCENCE,
allowance for, on income account, 329
machinery and equipment, 186
provisions for, 637
OFFICE MANAGEMENT, 600–620
books and records used, 602
copying, 615
filing systems, 613
for making audit, 46
mailing department, 615
mechanical devices, 604–613
OFFICERS OF COMPANIES, ACCOUNTS RECEIVABLE FROM, 99
ORDERS,
sales, verification of, 517
valuation of materials purchased specifically for, 137
ORGANIZATION EXPENSES, 576
not fixed assets, 174
OVERDRAFTS, NOT DEDUCTED FROM BANK BALANCES, 89
OVERVALUATION, 215–217

P

PAPER, REQUIRED FOR AUDIT, 48
PAR VALUE, STOCK, 207
PARTNERSHIPS,
advantages of audits to, 34
liabilities between partners, 225
liquidating, 465
accounts receivable, 466
apportionment of profits and losses, 467
valuation of machinery and fixtures, 467
valuation of stock on hand, 466
partners' salaries, 460
partners' withdrawal of funds, 594
PASS-BOOKS, 86
PATENTS,
cash value, 192
depreciation, 652
expenses over litigation, 191
investigation of litigation, 484
revaluations, 192
royalties, 462
Treasury Department ruling, 192
valuation, 190–193
PATTERNS, VALUATION, 189
PAYMENTS (See "Cash payments," "Expenses," "Expenditures")

PAY-ROLL,
accrued wages, 241
internal check, 66
signing of, 67
verification of, 556–563
PERSONAL ELEMENT,
towards stability of a business, 471, 483
towards success of a business, 453
PETTY CASH FUND,
branch office, 68
verification, 63, 87, 548
vouchers for disbursements from, 63, 546, 548
PLANT RECORDS, ANALYSIS OF, 175–177
POSTAGE STAMPS, 115, 566
POSTINGS,
cash discounts, 523
cash payments, 513
customers' accounts, verification of, 511
nominal account, verification of, 511
purchase records, 498
sales records, 499
verification of, 496
PRICE FIXING, 304
PRICES,
after closing date of balance sheet, 151
during 1919 and 1920, 129–131
effect of fluctuating on inventories, 126–131
market, 142
replacement, 142
sales, 142
PROCEDURE,
accounts receivable, 62
American Institute of Accountant's memorandum on, 61
bank cheques, arrangement of vouchers, 62
controlling accounts, reconcilement with subsidiary records, 61
Federal Reserve Board, recommendations of, 61
inventory, 162–169
inventory sheets, 62
notes payable, 62
notes receivable, 62
preliminary,
arrangement of working papers, 47
authority for making audit determined before starting audit, 39
choice of method, 55
co-operation with client and staff, 41
familiarity with system in use, 52
fees, 43–46
fixing responsibility for audit, 39
limitations of balance sheet audit understood by client, 72
mapping out program, 40
PROCEDURE—*Continued*
preliminary—*Continued*
office arrangement, 46
place of making audit, 46
provision for contingent liabilities, 54
schedule of books, records and names of clerks, 53
stationery needed, 48
when supplanting another auditor, 4
statements from creditors, 62
trial balance, 61
PRODUCTION METHOD FOR DEPRECIATION, 631
PROFESSIONAL ETHICS (See "Ethics")
PROFITS (See also "Capital"; "Revenue profits")
earned,
items segregated from unearned in inventory valuation, 160
only on delivery of sales contract, 170, 521
extraordinary not earnings, 457
from insurance not current earnings, 458
from sale of capital assets, 280
insurance, 459
interdepartmental or intercompany, 152
methods of figuring on stock, 617
not an element of cost, 171
on construction work, 589
on orders filled after closing date of balance sheet, 151
undivided is earned surplus, 280
unearned,
valuation of, in inventory, 149, 160
(Hutchinson *v.* Curtiss), 146
PROFIT AND LOSS STATEMENT (See also "Income account")
defined, 405
PROFIT-SHARING EMPLOYEES, NET AMOUNTS AS LIABILITIES, 243
PROGRAM (See also "Procedure")
value of, 60
PROOF-SHEET, 619
PUBLIC SERVICE CORPORATIONS, INVESTIGATIONS OF, 463
PUBLICITY OF CORPORATION REPORTS, 37
PURCHASES (See also "Accounts payable"; "Commitments"; "Expenditures")
accounts payable on balance sheet audit, 228–231
comparison of invoice with goods received, 65
internal check for, 64
invoices,
department store methods, 65
verification of, 541–546
verification of, in inventory, 164

PURCHASES—*Continued*
of a business, investigation for, 432–469
order and receiving books inspected, 230
payment for, 65
received, checking system, 64
records, verification of, 498
verification of items, 538–551
PURCHASING DEPARTMENT, TESTS FOR EXAMINATION OF, 542

R

RATE-MAKING, PUBLIC CONSTRUCTION, 590
RAW MATERIALS INVENTORY VALUATION, 124, 125, 137, 167
REAL ESTATE,
as security for bonds, 205
classification of, 180
depreciation, 638, 643
liens on, 180
purchases of, 588
rents receivable, 530
sale of building lots, 535
title to, 180
valuation, 179–184
RECEIPTS (See "Accounts receivable"; "Income account")
RECORDS,
auditor should secure a list of all used, 515
original, 604
compared with final, 516
titles of, should be distinctive, 514
REDISCOUNTS, 339
RENT, 447
payable, 241
receivable, 530
REORGANIZATIONS,
investigations for, 468
new system of accounts for, 455
REPAIRS,
depreciation for, 625, 647
in book value of property, 178
verification of, 551
REPLACEMENTS,
cost of, 142
in book values of property, 178
verification of, 551
REPORTS, (See also "Investigations")
Forms, 354–357
"as of" date of balance sheet, 364
auditor's liability for, 359
balance sheet, forms of, 365–381
certificates of audit, 360–365
compulsory, 420
Federal Trade Commission inquiry blank, 358
REPORTS—*Continued*
graphic charts, 410–417
income account, 406–409
information for banker, 353
information on, should be of real value, 353
legal requirements in England and Canada, 420
liability of auditor for, 359
liens, provisions for, 405
omissions from, 417
precautions against separation of sheets, 365
proper preparation and presentation, 352
requirements of, 359
scope of, 359
tact used when making, 42
terminology on, 354
unauthorized use of, 418
verification of items on, 359
water marked paper, 365
REQUISITIONS, CONTROL OF, 64
RESERVES,
against accounts receivable, sufficiency of, 31
as assets, 267
as liabilities, 267
balance sheet treatment, 269
classes of, 267
excessive, 215, 458
for accounts receivable, 90
for accrued losses, 461
for bad debts, 251, 314
for cash discounts, 90, 332
for depreciation (See "Depreciation reserves")
for dividends, 288
for inventories, 120, 125, 129
for retiring bonds, notes, etc., 286
for retirement of preferred stock, 286
for taxes, 240
for working capital, 287
interest out of, not good practice, 409
investments of, 202
on balance sheet, 267–271
on income account, 324, 409
procedure, 283
secret, 214–220, 622
segregation of, 269
surplus, 268
transferred to surplus, 283
RETURNED GOODS,
cancelled contracts, 312
credit for, verified, 553–556
deducted from gross income, 311
record for purchases, 65

REVENUE PROFITS (See also "Income account")
allowances and rebates, 313
anticipated, 315
appreciation in value of assets, 321
completed *vs.* incompleted transactions, 314
defined, 309
departmental, 317
distribution of, among departments, 317
dividends paid out of, 321
fixed percentage basis, 316
intercompany, 318
ordinary transactions only, included, 312
participations and underwriting, 320
returned goods, 311
royalties, 321
sales for future delivery, 319
sale of capital assets, 320
use of estimates, 316
ROYALTIES,
income from, 321, 462
payments for machines, 593
RULES,
American Institute of Accountants, 12
Institute of Chartered Accountants, 14

S

SALARIES,
directors', 667
partners', 460
selection of accounts for, 592
verification of, 556–563
SALES,
advances and deposits collected in advance, 522
advantages of audits in, 37
cash, verification of, 517
fictitious or fraudulent, 442, 512–528
future delivery (See "Future delivery")
invoices,
check system for, 65
comparison of, 65
duplicates, 65
of a business,
actual values in balance sheet, 141
investigations for, 432–469 (For full entries see "Investigations")
of capital assets not credited to capital surplus, 280
on consignments, 312, 521
price, 142
when to value inventory at, 147–150
profits realized only on delivery of, 171
records, verification of, 499
relation of outstanding contracts to raw materials, 168
SALES—*Continued*
valuation of orders in declining market, 167
verification of, 442, 516–528
tests for falsification, 517
SALESMEN,
commissions, 559
expenses, 559
SCRUTINY, DEFINED, 493
SECURITIES,
are fixed assets, 111
as stock-in-trade, inventory of, 111
blue-sky laws, 302
income from corporation's own issue, 536
provisions of, 263
reserves for retiring, 282–287
SHIPS, DEPRECIATION, 651
SINGLE ENTRY BOOKS, AUDIT OF, 52
SINKING FUNDS,
depletion method, 211
examination of, 200
for depreciation, 628–631
vs. for bond retirement, 632
for retiring bonds, notes, etc., 286
for retiring preferred stock, 286
reserves for, 282–287
illustration showing procedure, 289
STATEMENTS (See also "Financial statements," "Reports")
customer's,
not accessible to cashier, 63
verification of, 527
from creditors, 62
STATIONERY FOR MAKING AUDIT, 48
STATISTICS, USE OF, TO AUDITOR, 435
STOCK (See also "Capital stock," "Dividends")
no-par value, 208, 274–277
on balance sheet, 374
par value of, 207
preferred,
dividends on, 595
premiums on redeemable, 584
reserve for retirement of, 286
sold on instalment plan, 274
treasury, 206–208
sale of, 292
STOCK-BROKERS,
interest time, 660
STOCK CERTIFICATES,
definitions and provisions, 706–708
examination of, 597
STOCKHOLDERS,
majority interests, 343
minority interests, 341
protected by audit, 36
statutory liability, 213

STOCK-IN-TRADE (See also "Inventory")
deterioration of, 167
methods of keeping, 615
perpetual inventory, 67
pricing, 617
turnover, 444
valuation for liquidating partnership, 466
value of, branch offices, 69
verification of inventory, 162
STORES (See "Inventory," "Stock-in-trade")
SUBORDINATED DEBTS ON BALANCE SHEET, 224
SUBSCRIPTIONS, 536
SUBSIDIARY COMPANIES,
amounts due from, 97–99
consolidated balance sheet, 337–347
consolidated income account, 347–351
defined, 337
intercompany profits, 318
liabilities of, 251
purchase of stock of, 344
SUPPLIES, INVENTORY OF, 172
SURETY BONDS FOR EMPLOYEES, 35, 459, 557
SURETYSHIP, INDORSEMENTS FOR, 255
SURPLUS, 268, 278–289
accounts, 279
analysis of, 279
appropriated, 280, 282
capital, 279
when separated from earned, in balance sheet, 374
consolidation of accounts not good practice, 279
contributed, are distributions of capital, 295
earned, 280
when separated from capital, on balance sheet, 374
from net income, 333
groupings of, in balance sheet, 280
investment of, 289
nature of, 279
not a fund, 279
paid-in, 279, 281
reserve, 268
for dividends, 288, 309
for working capital, 287
sinking fund, 282–287
tax regulations, 281
transfer of special reserve to general surplus, 283
valuation, 203

T

TACT REQUIRED OF AUDITOR, 43
TANGIBLE ASSETS (See "Assets, Tangible")
TAX RATES, BALANCE SHEET AND, 31
TAXES,
accruals and reserves for, 240
examination of, 599
investigation of, 462
payable, 239
reserves for, 240, 409
TERMINOLOGY, 296–300, 354
TESTS, DEFINED, 493
THIRD AVENUE RAILWAY CO., DEPRECIATION FUND, 628
TICKETS, UNUSED, AS LIABILITIES, 244
TIMBER DEPRECIATION, 654
TIMBER LAND VALUATION, 212
TOOLS,
depreciation for ,649
valuation, 187
TRADE ACCOUNTS,
notes receivable, 107
on balance sheet audit, 228
overdue, 91–96
TRADE DISCOUNTS, 331
treatment of, 532
TRANSPORTATION CHARGES,
checking system of, 64
verification of, 566
TRAVELING EXPENSES, 242, 559
TREASURY STOCK, 206–208
sale of, 292
TRIAL BALANCE, 61
as an aid in verifying income, 518
branch ledger, 68
detailed audit, 578–581
forced, 498
TRUST RECEIPTS, 80
TURCK, J. A. V., "ORIGIN OF MODERN CALCULATING MACHINES," 613
TURNOVER,
calculation of, 444

U

UNDERVALUATIONS, 217–219
UNFINISHED GOODS (See "Work in Progress")
UNIFORM ACCOUNTING,
proposal of Federal Reserve Board, 679–705
UNITED STATES BUREAU OF CORPORATIONS,
on good-will, 198
UNITED STATES STEEL CORPORATION,
reserves against falling prices, 125, 129
UNITED STATES TREASURY,
interest time calculations, 661, 663
ruling regarding instalment accounts, 103
ruling regarding inventory, 121
ruling regarding patents, 192

V

VACATIONS, 67
VALUATION,
accounts receivable, 91
actual on balance sheet of business for sale, 141
adjustment of cost to value, 144
assets, 73
appreciation in, 321
in making investigations, 426
liquidating partnerships, 465
automobiles, 189
book value as actual, 175
buildings, 179–184
containers, 187
copyright, 194
drawings, 189
electrotypes, 190
equipment, 185
excessive, 215–217
fixed assets, 173
fixtures, 187, 467
furniture, 187
good-will, 195–200
horses, 188
inventories, 117–172 (For full entries see "Inventory")
investments, 202–209
land, 181–182
leaseholds, 183
Liberty bonds, 112
machinery, 185, 467
market value defined, 74
methods of arriving at, balance sheet, 177–179
mines, 212
mortgages, 205
notes receivable, 607
patents, 190–193
patterns, 189
real estate, 179–184
revaluation as at March 1, 1913, 140, 322
securities, 111
stock, 206–209
stock-in-trade, liquidating partnership, 466
timber land, 212
tools, 187
undervaluations, 217–219
VALUATION—*Continued*
values as of March 1, 1913, in computing costs, 140
variations in, 434
wagons, 189
wasting assets, 209–213
woodcuts, 190
VOUCHERS,
bank cheques, 63
arrangement of, 62
use of, 539
branch office, internal check on, 68
cancellation of, 550
certified bills as, 540
expense, verification of, 538
for notes paid, 593
former method of auditing, 57
journal, 549
missing, 546
on reports, 417
petty cash fund, 63, 546, 548
postage, 566
purchases, 541–546

W

WAGES (See also "Pay-rolls")
accrued, 241
verification of, 560
vouchers, 546
WAGONS,
depreciation, 650
valuation, 189
WASTING ASSETS (See "Assets, wasting")
WATER, BILLS PAYABLE FOR, 241
WATER-MARKED PAPER FOR REPORT, 365
WEBSTER, GEORGE R., ON CONSOLIDATED ACCOUNTS, 335
WITNESSES, AUDITORS AS, 428–432
WOODCUTS, VALUATION, 190
WORK IN PROGRESS,
estimates on, 316
profit from, 314
when no profit is included, 316
WORKING PAPERS,
arrangement of, 46
filing of, 50
in law cases, 429
to be preserved, 425